MELSOFT

Programmable Logic Controllers

Operating Manual

GT Designer2 (Vers. 1)

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Version C

• SAFETY PRECAUTIONS •

(Please read it carefully before using this product)

Before using this product, please read carefully the manual and its related manuals introduced thereinafter, and pay full attention to the safety to handle the product correctly.
The instructions given in this manual are concerned with this product.
In this manual, the safety instructions are ranked as “DANGER” and “CAUTION”.

! DANGER	Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
! CAUTION	Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Note that the ⚠CAUTION level may lead to serious consequences according to the circumstances.

Always follow instructions of both levels because they are important to personal safety.

[Test operation precautions]

! DANGER

- Please read this manual carefully and understand it thoroughly before executing system monitor, special module monitor, and circuit monitor (bit device on/off, current value change of word device, setting value of timer/counter and current value change, and current value change of buffer memory) During test operation, DO NOT change the devices data that are used to execute important system operations.
  Mis-output or mis-operation may cause accidents.

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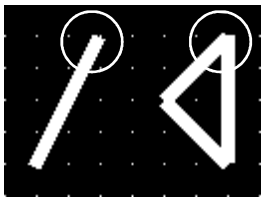
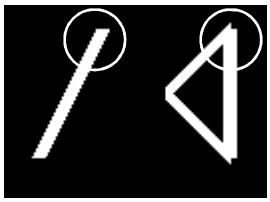
Cautions for using this software

1. Required PC memory
   The processing may be terminated by Windows® on a personal computer of which main memory capacity is less than 64M bytes. Make sure to secure the capacity of 64 M bytes or more.
2. Free capacity of hard disk (virtual memory)
   At least 50M bytes of free capacity of virtual memory should be secured within hard disk to run this software.
   The processing may be terminated by Windows®, if 50M bytes or more of free space cannot be secured within hard disk while running GT Designer.
   Secure enough free capacity of virtual memory within hard disk space in order to run the software.
   When enough free capacity cannot be secured, make sure to save projects frequently.
3. Error messages displayed while starting and editing
   "Operation will be terminated because of insufficient memory. Would you like to stop?"
   If the above message appears, close other running application software or reboot Windows in order to secure at least 50M bytes of free hard disk space.
4. GT Designer2 and GOT display
   (a) Cautions for displaying straight line other than full line (dotted line, for example) in Bold
   When straight line other than full line is drawn in bold, the line may not be displayed with its actual line width on a personal computer. However, it will be displayed correctly on GOT. This phenomenon does not mean data problem.
   (b) Display of end points of straight line/line freeform/polygon
   As shown below, the end points of straight line/line freeform/polygon are displayed differently between GT Designer2 and GOT.

On GT Designer 2



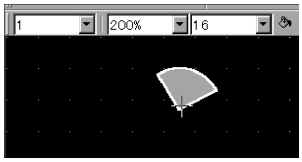
On GOT



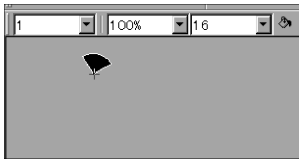
   (c) Start position for filling patterns
   Some filling patterns may be differently displayed. For example, the start position may be different between GT Desginer2 and GOT.
   (d) Drawing of different type lines
   The length of the dots varies in different dotted lines (for example: the chain lines).
   (e) Display of object
   The display position of the memory data display in graph function is different between GT Designer2 and GOT.
   Even if the display-start-line of a comment has been set, the comment will be displayed from the first line on GT Designer2.
   (f) Display magnification
   When display magnification is changed, the connected lines or figures may be separated or the filled-paint may be out of outline of the figure.
   However, if they are displayed correctly on the preview screen, they will appear correctly on GOT as well.

   (Example): When filled-paint is out of the outline.

Display magnification: 200%



Display magnification: 100%



Position of Paint mark may be shifted and the filled-paint may be out of the figure outline.

5. Restrictions when the color setting is changed to the setting of less colors in the system environment (256 colors → 2 colors)
   • The color palette for setting color will be changed according to the updated settings.
   • The color on the drawing screen will be kept the same as prior to the change.
     If the color setting for a [red] rectangle-figure is changed to the 2 colors (B/W), the [red] color will remain.
   • The colors of the image data (BMP format file) will be reduced when the project is stored, the screen is closed and that image data is double-clicked.

6. Object function and device type
   he object (bit lamp or word lamp),for which bit device setting and word device setting are separated, cannot be converted between bit device and word device.

7. When device type is changed
   Confirm the device type when the set bit device is changed from bit device into word device.
   The device flag may be represented as “??” ,depending on the settings .
   (Example) D0. b0 → D0 D0.b5 → ??

8. OS setting
   Set the font size as “Small Font” when setting OS (Windows®) screen.
   The GT designer2 dialog box cannot be displayed correctly if the font size is set as “Large font”.

9. When the toolbar icon appears in smaller size after startup of GT Desinger2
   The toolbar icon may appear in smaller size right after GT Deseiger2 is started up.
   To correctly display the icon, initialize it as instructed below.
   (Click on [Project] → [References] from the menu, and select the toolbar tab. Click on Reset All button in that tab.)

10. When using GT Designer2 in the PC in which the OS other than Japanese version
    The text may not be displayed correctly depending on the OS versions; some version include the fonts incompatible with GT Designer2 or GOT.

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REVISIONS

※ The manual number is given on the left bottom of the back cover.

Print Date	Manual Number	Revision
Apr., 2003	SH (NA)-080278E-A	First edition
Aug., 2003	SH (NA)-080278E-B	Partial corrections Section 3.2, Section 3.5, Section 4.2, Section 5.4, Chapter 6 Partial additions Section 5.1.1, Section 6.1.2, Section 6.2.1, Section 6.2.2 Additions Section 9.5
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Japanese Manual Version SH-080279-E

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Manual Configuration

The following explains the manual configuration

Chapter 1	OVERVIEW	The overview of this manual and features of the GT Designer2 are described.	1
Chapter 2	SYSTEM CONFIGURATION	The system configuration for using the GT Designer2 is described.	2
Chapter 3	SCREEN CONFIGURATION OF GT DESIGNER2	The screen configuration for the GT Designer2 and the screen customizing method are described.	3
Chapter 4	CREATING AND EDITING SCREEN	The operations from the start-up of the GT Designer2 to saving screens are explained.	4
Chapter 5	DATA TRANSFER OPERATION	The explanation on data transfer to the GOT and the transfer method are described.	5
Chapter 6	PRINTING PROJECT/FILE OUTPUT	The project printing method is described.	6
Chapter 7	USING LIBRARY	The library utilization method is described.	7
Chapter 8	DRAW AND EDIT	The drawing of figures and the editing method for objects and figures are described.	8
Chapter 9	USEFUL FUNCTIONS	The functions useful for drawing are described.	9

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INTRODUCTION

Thank you for choosing Mitsubishi Graphic Operation Terminal (Mitsubishi GOT).
Read this manual and make sure you understand the functions and performance of the GOT thoroughly in advance to ensure correct use.

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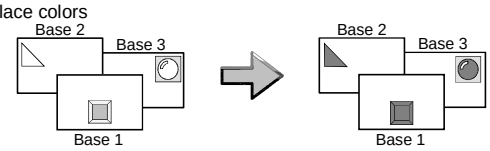
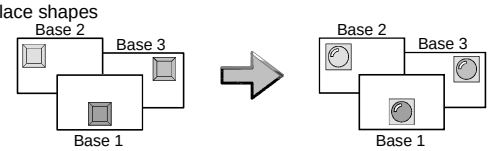
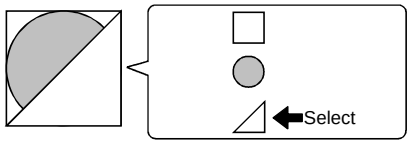
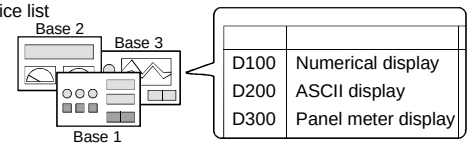
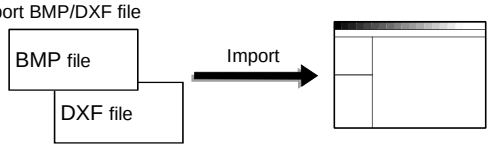
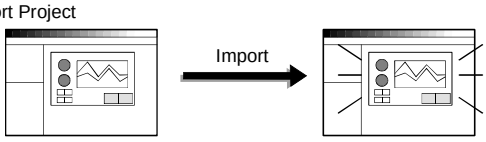
Function Quick Reference

Edit Operation (GT Designer2 Version1 Operating Manual)

Image	Function	Page
Align	Aligns objects or images	Page 8-18
Property sheet	Sets same attributes to objects or images in the same screen	Page 9-1
Replace colors 	Changes the color(s) of the objects and figures arranged on plural screens at the same time	Page9-10
Replace shapes 	Changes the switch/lamp figures at the same time	Page9-10
Replace devices	Changes the preset devices at the same time	Page9-10
Data View 	Overlapping images or objects	Page 9-14
Device list 	Display the set device in list	Page 9-15
Multiple language input	Input characters or comments in other language.	Page9-21
Import BMP/DXF file 	Imports BMP/DXF files	Page8-10
Import Project 	Utilizes other project data	Page9-28

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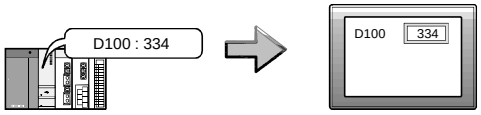
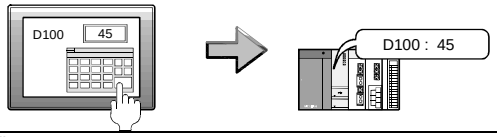
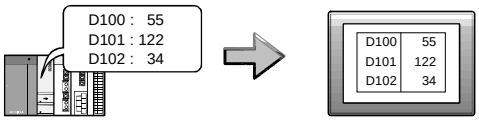
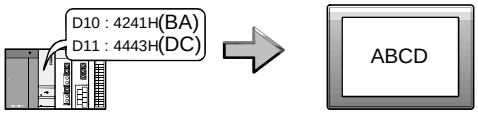
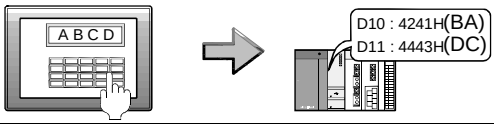
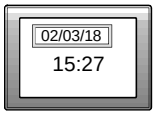
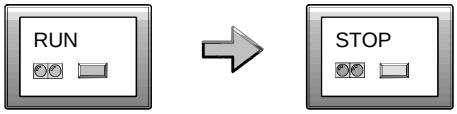
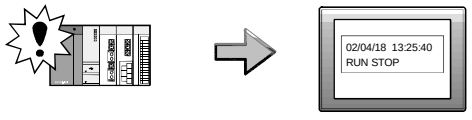
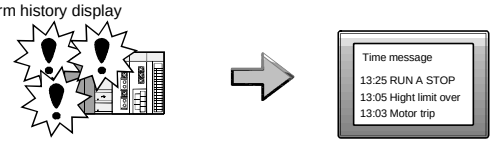
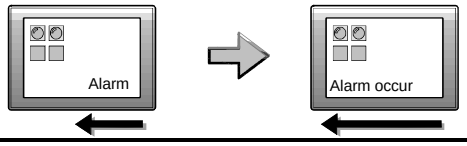
Object Functions (GT Designer2 Version1 Reference Manual)

1 Digit/font display

Image	Function	Page
Numerical display 	Displays device value in numerical value	Page 5-61
Numerical input 	Write value on device	Page 5-61
Data list 	Display multipledevice value in list	Page 5-85
ASCII display 	Displays device value in text	Page 5-100
ASCII input 	Inputs text code device	Page 5-100
Clock display 	Displays hour/minutes, year/month/date	Page 5-112
Comment display 	Displays command	Page 5-118

2 Alarm

Image	Function	Page
Alarm list 	Displays message at alarm occurence	Page 5-137
Alarm history display 	Displays alarm history	Page 5-160
Alarm flow 	Displays alarm in floating	Page 5-186

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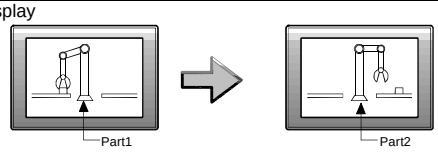
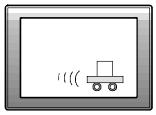
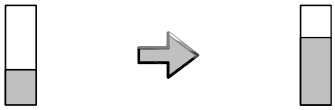
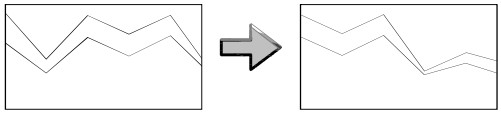
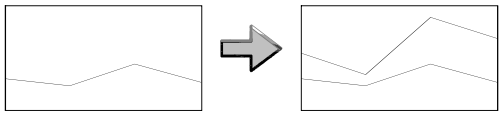
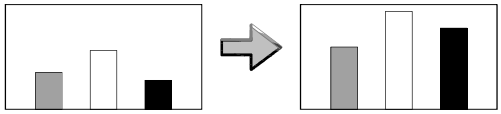
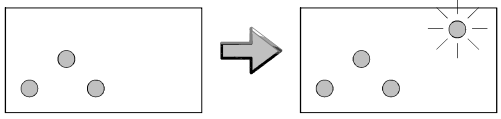
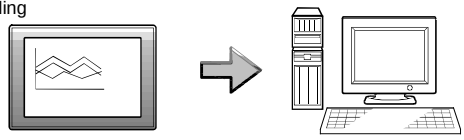
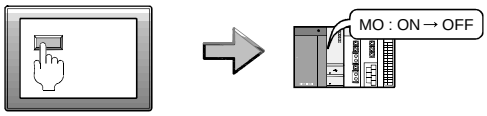
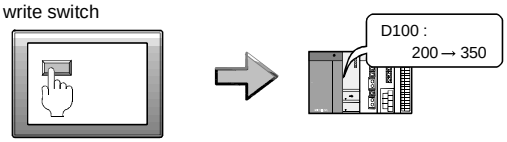
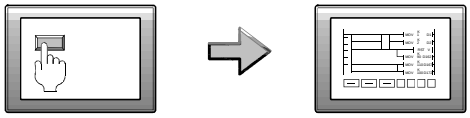
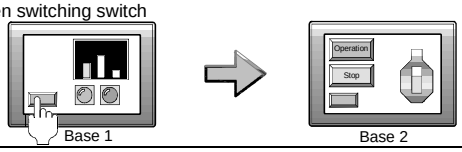
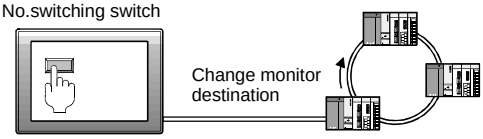
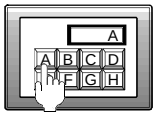
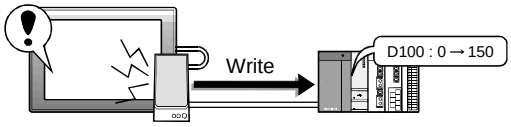
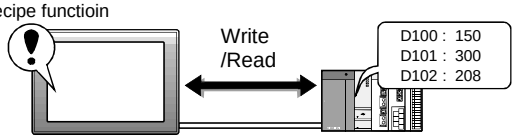
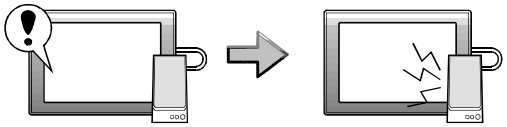
3 Animation

Image	Function	Page
Parts display 	Display entered device	Page 5-191
Parts movement display 	Displays moving parts	Page 5-209
Lamp display	Displays device value via lamp color changing	Page 5-238
Panel meter display	Displays device data on panel meter	Page 5-252
Level display 	Displays device data in proportional level	Page 5-264
Trend graph display 	Displays device data in trend graph	Page 5-276
Line graph display 	Displays device data in line graph	Page 5-289
Bar graph display 	Displays device data in bar graph	Page 5-301
Statistics graph display	Displays device data in statistics graph	Page 5-313
Scatter graph display 	Displays device data in scatter grap	Page 5-323
Sampling 	Collect the device value and edit collected data on PC	Page 5-341

4 Touch switch

Image	Function	Page
Bit switch 	Touch it to switch device ON/OFF	Page 5-348
Data write switch 	Touch it to change bit device value	Page 5-363
Extended function switch 	Touch it to switch to the extended function screen	Page 5-368
Screen switching switch 	Touchitto switch between the base and window screen	Page 5-376
Part No.switching switch 	Touch it to switch the monitored PLC station No.	Page 5-386
Key code switch 	Used as the key for inputting numerical value/ASCII	Page 5-392

5 Trigger → action

Image	Function	Page
Status observation function 	Monitors status of device and write value to device or operates GOT when condition meets	Page 5-411
Recipe functioin 	Monitors status of device and write/read device data when condition meets	Page 5-420
Time action function 	Outputs the device writing and sound at specified time.	Page 5-429

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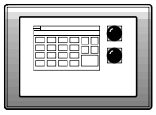
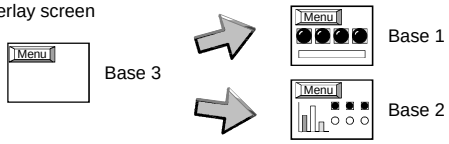
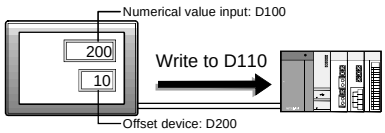
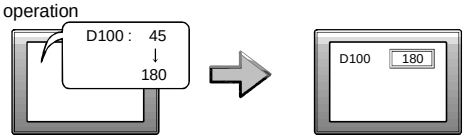
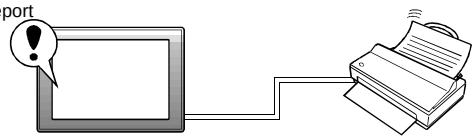
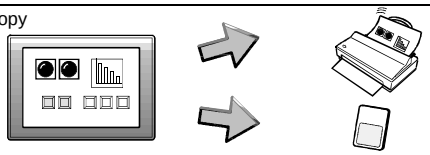
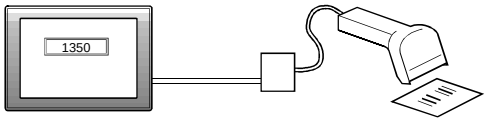
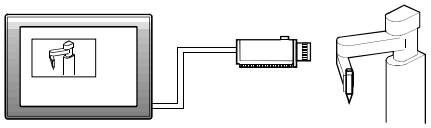
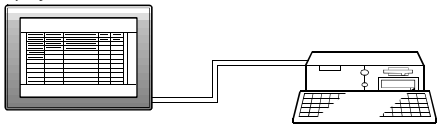
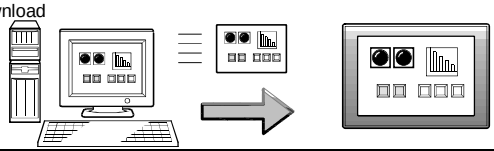
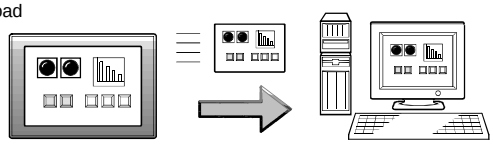
6 Auxiliary

Image	Function	Page
Test 	Changes device value via test window in monitor screen	Page 5-436
Script	Controls GOT display by scripts	Page 5-439
Set overlay screen 	Set overlay screen from other screens	Page 5-450
Security	Restricts the password users	Page 5-52
Offset 	Accumulates the offset device value in monitor device address and monitor.	Page 5-48
Data operation 	Operates device values by expression and enables objects using the operated value	Page 5-41

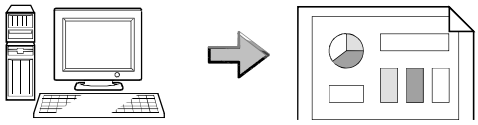
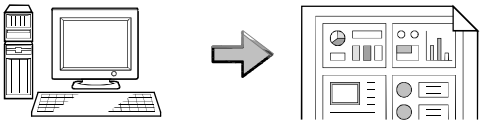
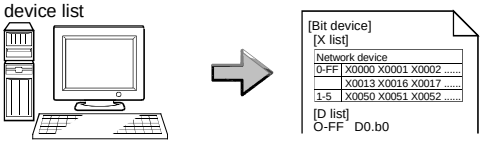
7 External input/output

Image	Function	Page
Report 	Collects numerical data when condition meets and prints the numerical data and corresponding code.	Page 5-458
Hardcopy 	Outputs the GOT monitor screen to printer or PC card	Page 5-481
Operation panel	Uses operation panel to execute device writing	Page 5-487
Bar code 	Writes data read by barcode reader to device	Page 5-495
Sound	Outputs sounds	Page 5-500
Video 	Displays video	Page 5-504
RGB display 	Displays PC screens	Page 5-522

Data Transmission (GT Designer2 Version1 Operating Manual)

Image	Function	Page
Download 	Transimits monitor screen data from PC to GOT	Page 5-1
Upload 	Transmits monitor screen data from GOT to PC	Page 5-17

Print (GT Designer2 Version1 Operating Manual)

Image	Function	Page
Print screen 	Print base/window/report screen	6-1
Print screen list 	Print base/window/report screen	6-1
Print device list 	Prints list of the device used	6-1

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Manuals

The following manuals related to this product are available.
Order the manual as required referring to this table.

Reference manual

Manual name	Manual number (model code)
GT Works2 Version1/GT Designer2 Version1 Operating Manual (Startup • Introductory Manual) Describes methods of installing GT Designer2 and introductory drawing methods (Sold separately)	SH-080250 (13JU25)
GT Designer2 Version1 Reference Manual Describes the specifications and settings of each object function used in GT Designer2 (Sold separately)	SH-080251 (13JU26)
GOT-A900 Series Operating Manual (GT Works2 Version1/GT Designer2 Version1 compatible Extended • Option Functions Manual) Describes the following extended functions and optional functions applicable to GOT Utility / Ladder monitor / System monitor Special module monitor / Network monitor / List editing Module monitor / Servo amplifier monitor / CNC monitor Font change (Sold separately)	SH-080253 (13JU28)
GOT-A900 Series User's Manual (GT Works2 Version1/GT Designer2 Version1 compatible Connection System Manual) Describes the system configuration of which connection method is compatible with GOT-A900 series as well as processing cables. (Sold separately)	SH-080255 (13JR50)
GOT-A900 Series Operating Manual (GT Works2 Version1/GT Designer2 Version1 compatible Gateway Functions Manual) Describes the gateway function specifications, system configuration and methods of setting GOT-A900 series. (Sold separately)	SH-080398E (1D0J00)
A985GOT/A975GOT/A970GOT/A960GOT User's Manual Provides performance specification, setting method, and communication board/communication module installation method of each GOT. (Sold separately)	SH-4005 (13JL70)
A950GOT/A951GOT/A953GOT/A956GOT User's Manual Provides performance specification, setting method, and communication board/communication module installation method of each GOT. (Sold separately)	SH-080018 (13JL92)
GOT-F900 Series HARDWARE Manual [CONNECTION] Explains the specifications, system configuration and connection diagram of each connection form available for the GOT-F900 series. (Sold separately)	JY992D94801 (09R805)
GOT-F900 Series OPERATION Manual [GT Designer2 Version] Explains the drawing specifications, utility function/HPP mode/special function unit monitoring function specifications, and dedicated monitor screen operation methods available for the GOT-F900 series. (Sold separately)	JY997D09101 (09R813)

Abbreviations and Generic Terms in This Manual

Abbreviations and generic terms used in this manual are as follows:

■ GOT

Abbreviations and generic terms		Description			
GOT-A900 series	A985GOT-V	A985GOT-TBA-V,	A985GOT-TBD-V		
	A985GOT	A985GOT-TBA,	A985GOT-TBD,	A985GOT-TBA-EU	
	A975GOT	A975GOT-TBA-B, A975GOT-TBA-EU	A975GOT-TBD-B,	A975GOT-TBA,	A975GOT-TBD,
	A970GOT	A970GOT-TBA-B, A970GOT-SBA, A970GOT-TBA-EU,	A970GOT-TBD-B, A970GOT-SBD, A970GOT-SBA-EU,	A970GOT-TBA, A970GOT-LBA, A970GOT-LBA-EU	A970GOT-TBD, A970GOT-LBD,
	A97＊GOT	A975GOT,	A970GOT		
	A960GOT	A960GOT-EBA,	A960GOT-EBD,	A960GOT-EBA-EU	
	A956WGOT	A956WGOT-TBD			
	A956GOT	A956GOT-TBD, A956GOT-TBD-M3,	A956GOT-SBD, A956GOT-SBD-M3,	A956GOT-LBD, A956GOT-LBD-M3	
	A953GOT	A953GOT-TBD, A953GOT-TBD-M3,	A953GOT-SBD, A953GOT-SBD-M3,	A953GOT-LBD, A953GOT-LBD-M3	
	A951GOT	A951GOT-TBD, A951GOT-TBD-M3,	A951GOT-SBD, A951GOT-SBD-M3,	A951GOT-LBD, A951GOT-LBD-M3	
	A951GOT-Q	A951GOT-QTBD, A951GOT-QTBD-M3,	A951GOT-QSBD, A951GOT-QSBD-M3,	A951GOT-QLBD, A951GOT-QLBD-M3	
	A950GOT	A950GOT-TBD, A950GOT-TBD-M3,	A950GOT-SBD, A950GOT-SBD-M3,	A950GOT-LBD, A950GOT-LBD-M3	
	A95＊handy GOT	A950GOT-SBD-M3-H,	A950GOT-LBD-M3-H,	A953GOT-SBD-M3-H,	A953GOT-LBD-M3-H
	A95＊GOT	A956GOT, A950GOT	A953GOT,	A951GOT,	A951GOT-Q,
GOT-F900 series	F940GOT	F940GOT-SWD-E,	F940GOT-LWD-E,	F943GOT-SWD-E,	F943GOT-LWD-E
	F930GOT-K	F930GOT-BBD-K-E			
	F930GOT	F930GOT-BWD-E,	F933GOT-BWD-E		
	F920GOT-K	F920GOT-BBD5-K-E,	F920GOT-BBK-E		
	F940 handy GOT	F940GOT-SBD-H-E, F943GOT-SBD-H-E,	F940GOT-LBD-H-E, F943GOT-LBD-H-E,	F940GOT-SBD-RH-E, F943GOT-SBD-RH-E,	F940GOT-LBD-RH-E, F943GOT-LBD-RH-E
	F940WGOT	F940WGOT-TWD-E			

■ Communication board/communication module

Abbreviations and generic terms		Description			
Communi-cation board	Bus connection board	A9GT-QBUSS, A9GT-50WQBUSS,	A9GT-QBUS2S, A9GT-50WBUSS	A9GT-BUSS,	A9GT-BUS2S,
	Serial communication board	A9GT-RS4, A9GT-50WRS4	A9GT-RS2,	A9GT-RS2T,	A9GT-50WRS2,
Communi-cation module	Bus connection module	A9GT-QBUS2SU, A7GT-BUS2S	A9GT-BUSSU,	A9GT-BUS2SU,	A7GT-BUSS,
	Data link module	A9GT-QJ71LP23, A7GT-J71AT23B	A9GT-QJ71BR13,	A7GT-J71AP23,	A7GT-J71AR23,
	Network module	A7GT-J71LP23,	A7GT-J71BR13		
	CC-Link communication module	A8GT-J61BT13,	A8GT-J61BT15		
	Ethernet communication module	A9GT-J71E71-T			

■ Option Module

Abbreviations and generic terms		Description
Option Module	External I/O module	A9GT-70KBF, A8GT-50KBF
	Printer interface module	A9GT-50PRF type
	Memory card interface module	A1SD59J-MIF
	Video/RGB mixed input interface module	A9GT-80V4R1
	Video input interface module	A9GT-80V4
	RGB input interface module	A9GT-80R1

■ Option

Abbreviations and generic terms		Description			
Option	Backlight	A9GT-80LTT, A9GT-70LTTBW,	A9GT-70LTTB, A9GT-50LT,	A9GT-70LTT, F9GT-40LTS,	A9GT-70LTS, F9GT-30LTB
	Debug stand	A9GT-80STAND,	A9GT-70STAND,	A9GT-50WSTAND,	A9GT-50STAND
	Memory board	A9GT-FNB, A9GT-FNB8M, F9GT-40FMB,	A9GT-FNB1M, A9GT-QFNB, F9GT-40UMB	A9GT-FNB2M, A9GT-QFNB4M,	A9GT-FNB4M, A9GT-QFNB8M,
	Ten-key panel	A8GT-TK			
	Bus connector conversion box	A7GT-CNB			
	Bus distance connector box	A9GT-QCNB			
	Protective sheet	A9GT-80PSC, A9GT-50PSC,	A9GT-70PSC, F9WGT-40PSC,	A9GT-60PSC, F9GT-40PSC,	A9GT-50WPSC, F9GT-30PSC
	Attachment	A77GT-96ATT,	A85GT-95ATT,	A87GT-96ATT,	A87GT-97ATT
	PC card (memory card)	Abbreviations of PC card with JEIDA Ver4.2 (PCMCIA Ver2.1)			
	Flash PC card	A9GTMEM-10MF,	A9GTMEM-20MF,	A9GTMEM-40MF	
	Compact Flash PC card	Abbreviation of Compact FlashTM (Compact FlashTM produced by Sun Disk.)			
	Connector conversion box	F9GT-HCNB			

■ Software

Abbreviations and generic terms		Description
Software	GT Works2 Version1	SW1D5C-GTWK2-E, SW1D5C-GTWK2-EV
	GT Designer2 Version1	SW1D5C-GTD2-E, SW1D5C-GTD2-EV
	GT Designer2	Abbreviation of GOT900 series graphic software-GT Designer2
	GT Simulator2	Abbreviation of GOT900 series screen simulator-GT Simulator2
	GT SoftGOT2	Abbreviation of monitoring software-GT SoftGOT2
	GT Converter	Abbreviation of GOT900 series data conversion software-GT Converter
	GX Developer	Abbreviation of SW□D5C-GPPW(-V)/SW□D5F-GPPW(-V) type software package
	GX Simulator	Abbreviation of SW□D5C-LLT(-V) type download test tool function software package (SW5D5C-LLT(-V) or later)
	DU/WIN	Abbreviation of FX-PCS-DU/WIN

■ License (for GT SoftGOT, GT SoftGOT2)

Abbreviations and generic terms	Description
License	A9GTSOFT-LKEY-P (for DOS/VPC)
License FD	SW5D5F-SGLKEY-J (for PC CPU module)

■ CPU

Abbreviations and generic terms		Description			
QCPU	QCPU (Q Mode)	Q00JCPU,	Q00CPU,	Q01CPU,	Q02CPU,
		Q02HCPU,	Q06HCPU,	Q12HCPU,	Q25HCPU,
		Q12PHCPU,	Q25PHCPU		
	QCPU (A Mode)	Q02CPU-A,	Q02HCPU-A,	Q06HCPU-A	
QnACPU	QnACPU type	Q2ACPU,	Q2ACPU-S1,	Q2AHCPU,	Q2AHCPU-S1,
		Q3ACPU,	Q4ACPU,	Q4ARCPU	
	QnASCPU type	Q2ASCPU,	Q2ASCPU-S1,	Q2ASHCPU,	Q2ASHCPU-S1
ACPU	AnUCPU	A2UCPU,	A2UCPU-S1,	A3UCPU,	A4UCPU
	AnACPU	A2ACPU,	A2ACPU-S1,	A3ACPU	
	AnNCPU	A1NCPU,	A2NCPU,	A2NCPU-S1,	A3NCPU
	AnCPU type	AnUCPU,	AnACPU,	AnNCPU	
	AnUS(H)CPU	A2USCPU,	A2USCPU-S1,	A2USHCPU-S1	
	AnS(H)CPU	A1SCPU,	A1SCPUC24-R2,	A2SCPU,	A2SCPU-S1,
		A1SHCPU,	A2SHCPU,	A2SHCPU-S1	
	A1SJ(H)CPU	A1SJCPU,	A1SJCPU-S3,	A1SJHCPU	
	AnSCPU type	AnUS(H)CPU,	AnS(H)CPU,	A1SJ(H)CPU	
	A1FXCPU	A1FXCPU			
		A0J2HCPU,	A2CCPU,	A2CCPUC24,	A2CJCPU
FXCPU		FX0 series,	FXON series,	FXOS series,	FX1 series,
		FX1N series,	FX1NC series,	FX1S series,	FX2 series,
		FX2C series,	FX2N series,	FX2NC series,	
		FX(2N)-10GM/20GM series			
Motion controller CPU	Motion controller CPU (A series)	A273UCPU,	A273UHCPU,	A273UHCPU-S3,	
		A373CPU,	A373UCPU,	A373UCPU-S3,	
		A171SCPU,	A171SCPU-S3,	A171SCPU-S3N,	
		A171SHCPU,	A171SHCPUN,	A172SHCPU,	
		A172SHCPUN,	A173UHCPU,	A173UHCPU-S1	
	Motion controller CPU (Q series)	Q172CPU,	Q173CPU		
FA controller		LM610,	LM7600,	LM8000	
MELDAS C6/C64		FCA C6,	FCA C64		

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■ Other PLC

Abbreviations and generic terms		Description			
Omron PLC		C200HS, C200HE), CV500, CVM1-CPU11, CJ1M, CPM2C,	C200H, CQM1, CV1000, CVM1-CPU21, CPM1, CPM1H	C200H α series (C200HX, C200HG, C1000H, CV2000, CS1, CPM1A,	C2000H, CVM1-CPU01, CS1D, CPM2A,
Yaskawa PLC		GL60S, GL130, MP-930,	GL60H, CP-9200SH, MP-940,	GL70H, CP-9300MS, MP-9200(H),	GL120, MP-920, PROGIC-8
Allen-Bradley PLC	SLC500 series	SLC500-20, SLC5/02,	SLC500-30, SLC5/03,	SLC500-40, SLC5/04,	SLC5/01, SLC5/05
	MicroLogix1000 series	1761-L10BWA, 1761-L16BWB, 1761-L32BWB, 1761-L20BWA-5A,	1761-L10BWB, 1761-L16BBB, 1761-L32BBB, 1761-L20BWB-5A	1761-L16AWA, 1761-L32AWA, 1761-L32AAA,	1761-L16BWA, 1761-L32BWA, 1761-L20AWA-5A,
	MicroLogix1500 series	1764-LSP			
Sharp PLC		JW-21CU, JW-33CUH, JM-100CU,	JW-22CU, JW-50CUH, Z-512J	JW-31CUH, JW-70CUH,	JW-32CUH, JW-100CUH,
Toshiba PLC	PROSEC T series	T3,	T3H,	T2E,	T2N
	PROSEC V series	Model3000,	S2T		
SIEMENS PLC		SIMATIC S7-200 series, SIMATIC S7-400 series		SIMATIC S7-300series,	
HITACHI PLC (HIDEC H series)	Large-sized H series	H-302(CPU2-03H), H-4010(CPU3-40H),	H-702(CPU2-07H), H-300(CPU-03Ha),	H-1002(CPU2-10H), H-700(CPU-07Ha),	H-2002(CPU2-20H), H-2000(CPU-20Ha)
	H-200 to 252 series	H-200(CPU-02H,CPE-02H), H-252(CPU22-02H), H-252C(CPU22-02HC, CPE22-02HC)		H-250(CPU21-02H), H-252B(CPU22-02HB),	
	H series board type	H-20DR, H-20DT, HL-40DR,	H-28DR, H-28DT, HL-64DR	H-40DR, H-40DT,	H-64DR, H-64DT,
	EH-150 series	EH-CPU104,	EH-CPU208,	EH-CPU308,	EH-CPU316
Matsushita Electric Works PLC		FP0-C16CT, FP2, FP5, FP-M(C32TC)	FP0-C32CT, FP2SH, FP10(S),	FP1-C24C, FP2-CCU, FP10SH,	FP1-C40C, FP3, FP-M(C20TC),

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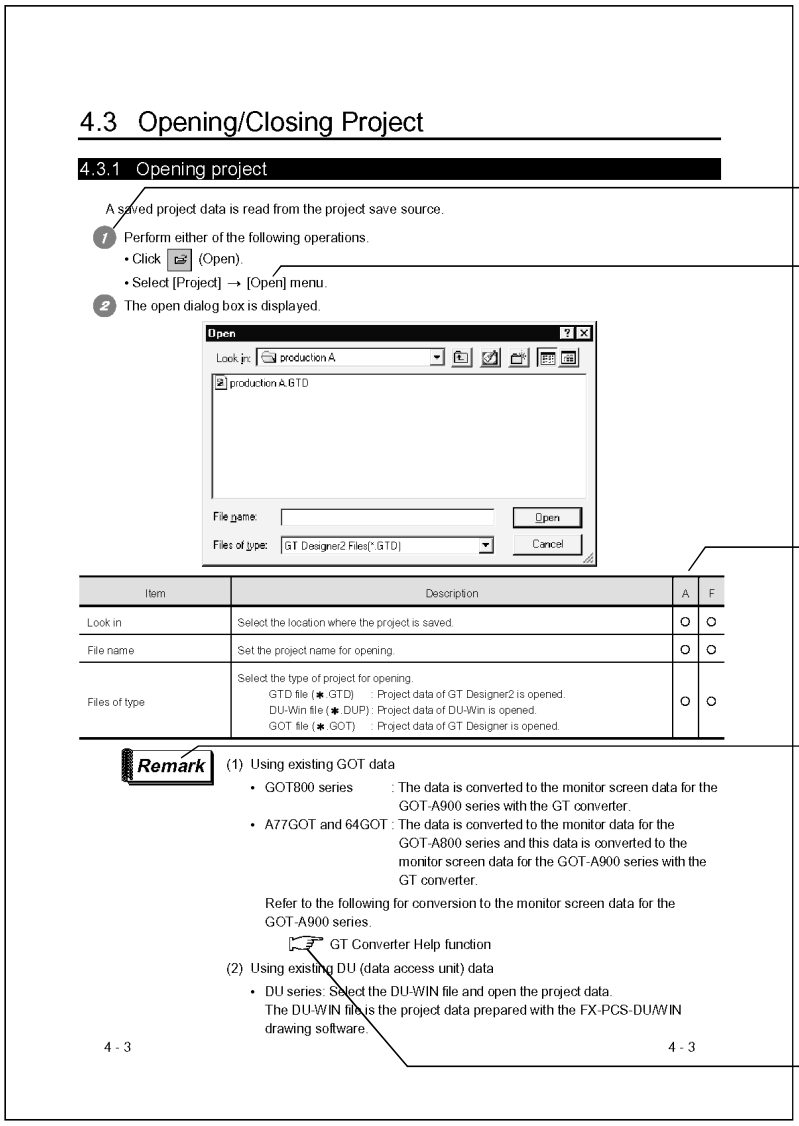
How to Use This Manual

Specification of symbols used in this manual



4.3 Opening/Closing Project

4.3.1 Opening project

A saved project data is read from the project save source.

1 Perform either of the following operations.
- Click (Open).
- Select [Project] → [Open] menu.

2 The open dialog box is displayed.

Item	Description	A	F
Look in	Select the location where the project is saved.	○	○
File name	Set the project name for opening.	○	○
Files of type	Select the type of project for opening. GTD file (✱.GTD) : Project data of GT Designer2 is opened. DU-Win file (✱.DUP) : Project data of DU-Win is opened. GOT file (✱.GOT) : Project data of GT Designer is opened.	○	○

Remark

(1) Using existing GOT data
- GOT800 series : The data is converted to the monitor screen data for the GOT-A900 series with the GT converter.
- A77GOT and 64GOT : The data is converted to the monitor data for the GOT-A800 series and this data is converted to the monitor screen data for the GOT-A900 series with the GT converter.

Refer to the following for conversion to the monitor screen data for the GOT-A900 series.

GT Converter Help function

(2) Using existing DU (data access unit) data
- DU series: Select the DU-WIN file and open the project data.
The DU-WIN file is the project data prepared with the FX-PCS-DU/WIN drawing software.

4 - 3 4 - 3

1 → 2 → 3 · · · ·
Indicates the operation steps.

Brackets used for the menu and items differ.
[ ] : Refers to menu in menu bar.
Refers to dialog box item or GOT utility menu.
□ : Refers to dialog box buttons or PC keyboard.

Shows functions applicable to GOT-A900 series (GOT-A900) GOT-F900 series (GOT-F900).
"○" , Applicable
"×" , N / A

Point — Refers to information required for operation.

Hint! — Refers to information useful for operation.

Remark — Refers to supplementary explanations.

Shows the items including detailed explanation (manual and the chapter, section, item).

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1. OVERVIEW

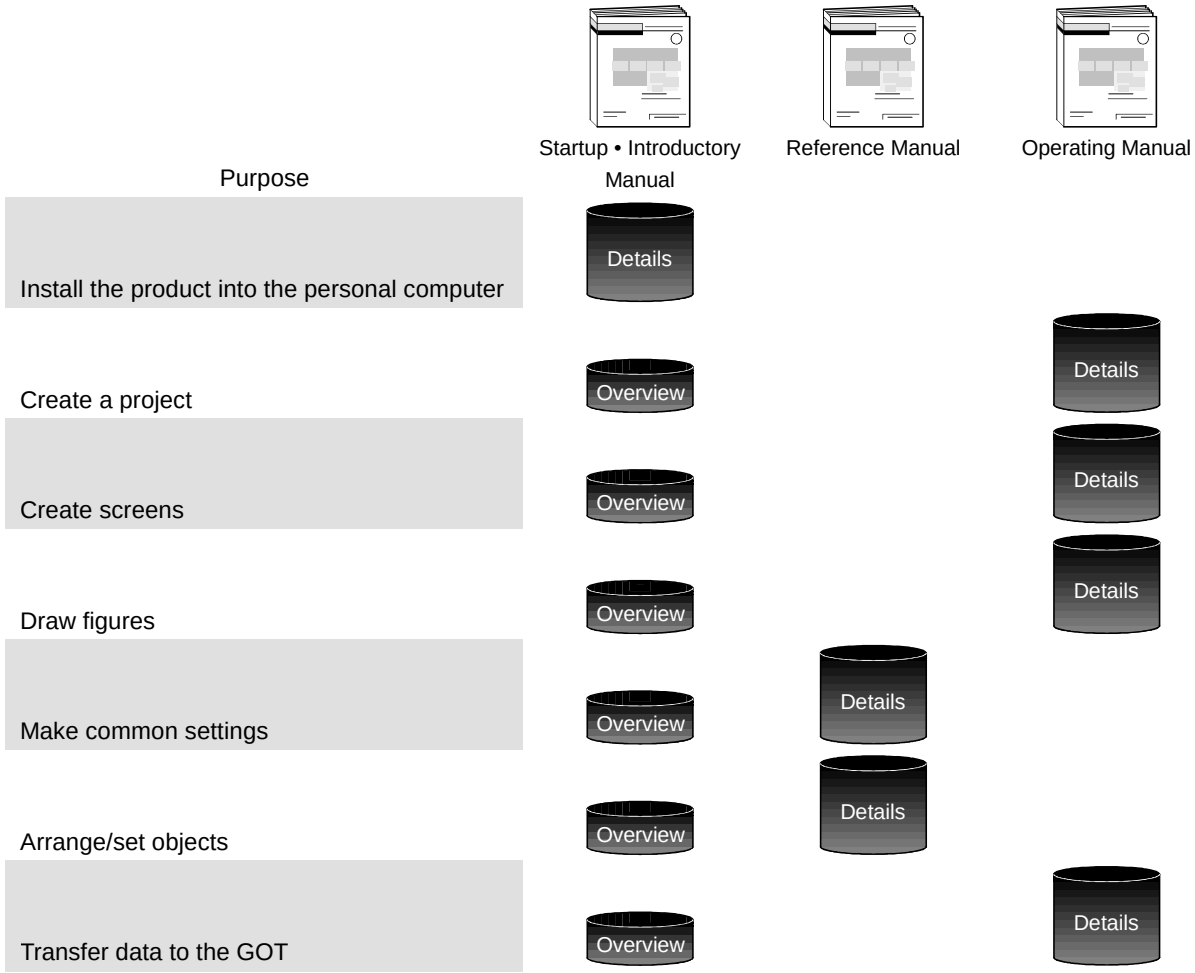
1

1.1 Overview

This manual explains the GT Designer2 system configuration, GT Designer2 screen configuration, basic dialog box operation, creation of new project, data transfer to GOT and convenient operation for screen editing.

1 Manuals

Three types of manuals are available for GT Designer2.
Refer to the appropriate manual depenfding on the purpose.
The manuals below are stored in PDF files and included with the product.



■ Startup & Introductory manual
The product installation method is described.
Examples of simple screen creation and operation on the GOT are described.

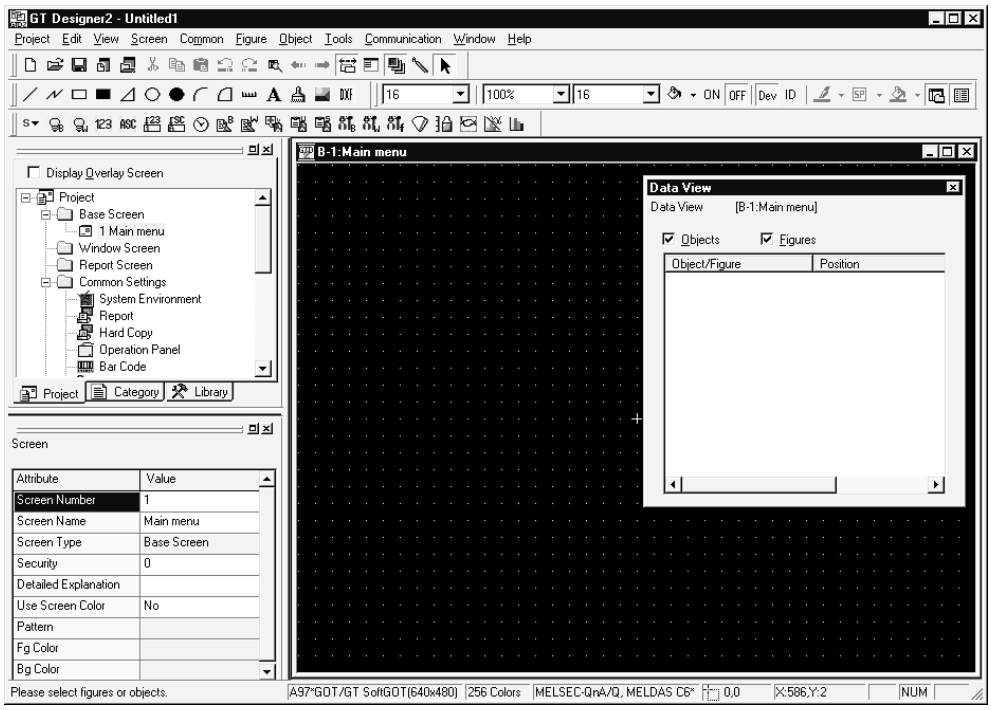
■ Reference Manual
Object/figure/screen specifications and object setting methods are described.

■ Operating Manual
Screen configuration, screen customizing, and procedures from project creation to data transfer on the GT Designer2 are described.

1 - 1

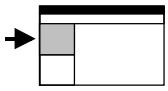
1.2 Feature

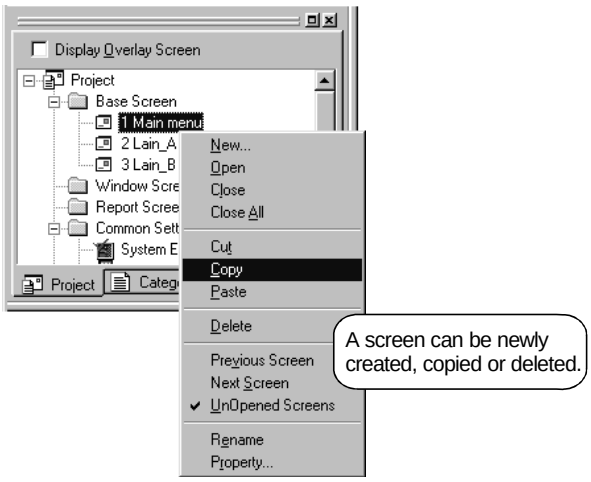
The GT Designer2 has various functions to improve the drawing efficiency.
Main functions of the GT Designer2 are described below:



1 Easy to know the overall project ..... ☞ Section 3.1.3 Operation of workspace

Settings of the overall project such as created screens or common settings are displayed on the tree. It is convenient to know the current settings, to check progress of work and to copy the screen.

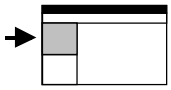


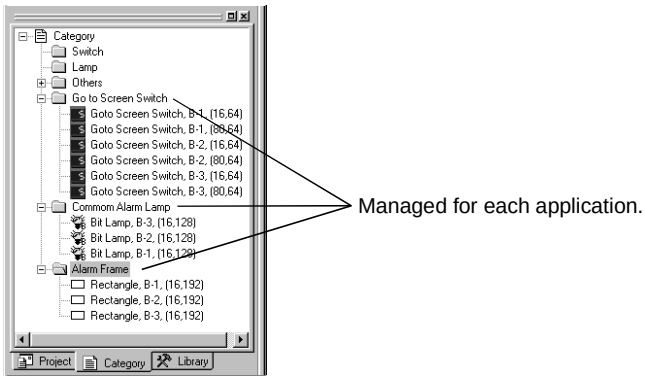


1 - 2

2 Easy to manage objects for each application .... ☞ Item 9.1.2 Managing object/ figure for each application

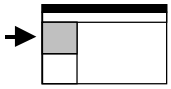
The overall project settings are displayed on the tree by category (type).
Classification for each application allows simple management of objects.



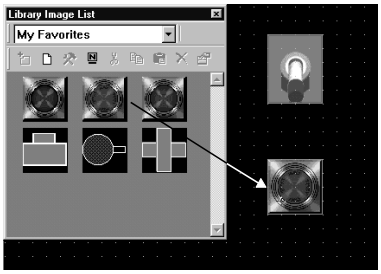


3 Easy to select parts frequently used ..... ☞ Chapter 7 Using library

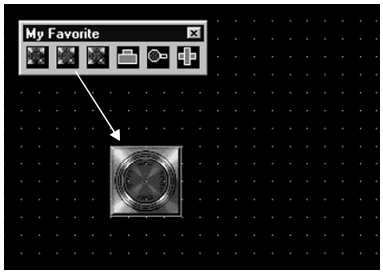
Objects or figures can be registered and pasted on the screen.
Objects or figures frequently used may be registered as buttons on the toolbar.



Pasting

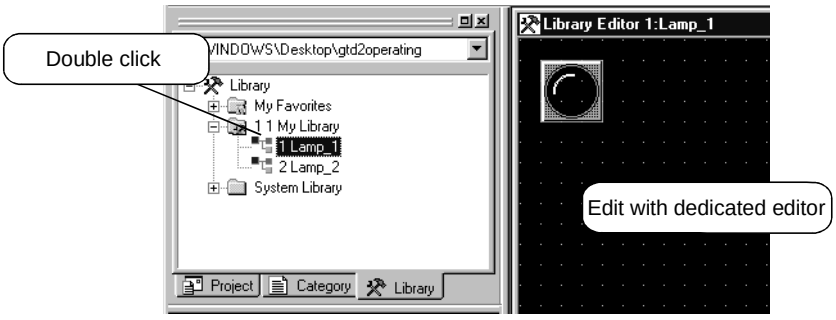


Pasting from toolbar



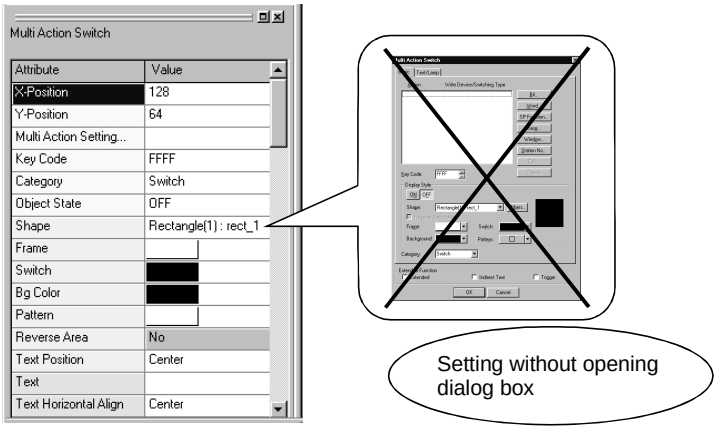
Simple edit of parts

Part objects or figures once registered can be re-edited with the dedicated editor (library editor).



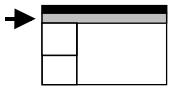
4 Shortest setting without opening dialog box ..... Item 9.1.1 Batch setting of multiple objects/figures on the same screen

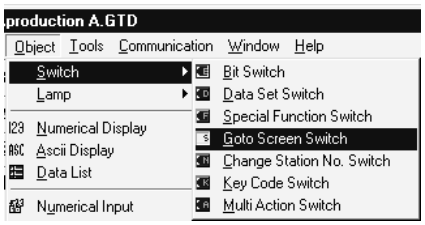
All setting items and setting details being currently selected are displayed in a list.
Objects and figures can be set without opening the dialog box and the setting details can be checked.



5 Classifying objects for each application

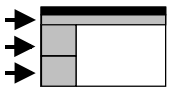
Since the touch switches are classified for each application, the desired touch switch for setting can be simply selected. The lamp display function and the part display function are classified into the bit device and the word device. In this way, the number of setting items is reduced.



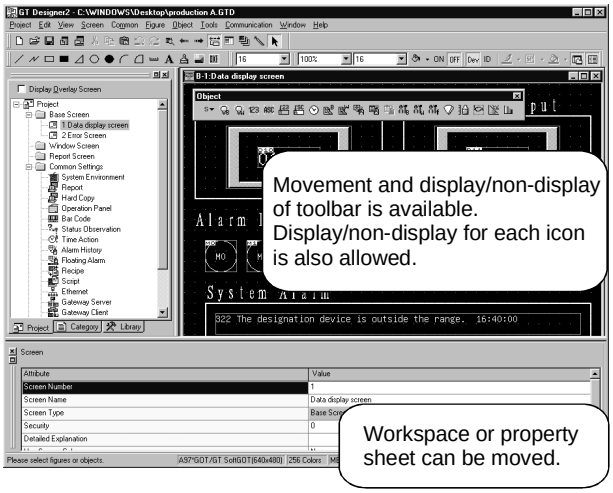


6 Customizing screen ..... Item 3.4.1 Customizing screen configuration

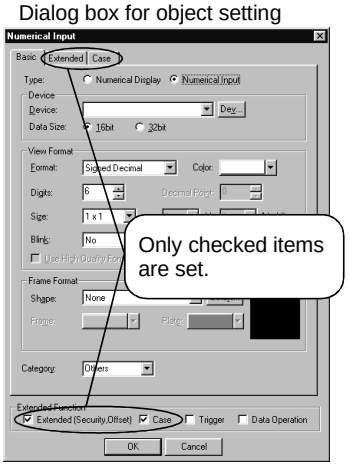
The screen can be customized for the workspace, movement of property sheet or toolbars display/non-display. You may create figures in the preferred environment.
The dialog box for setting objects may also be customized.



GT Designer2


Movement and display/non-display of toolbar is available.
Display/non-display for each icon is also allowed.
Workspace or property sheet can be moved.

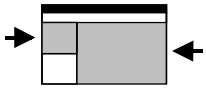
Dialog box for object setting

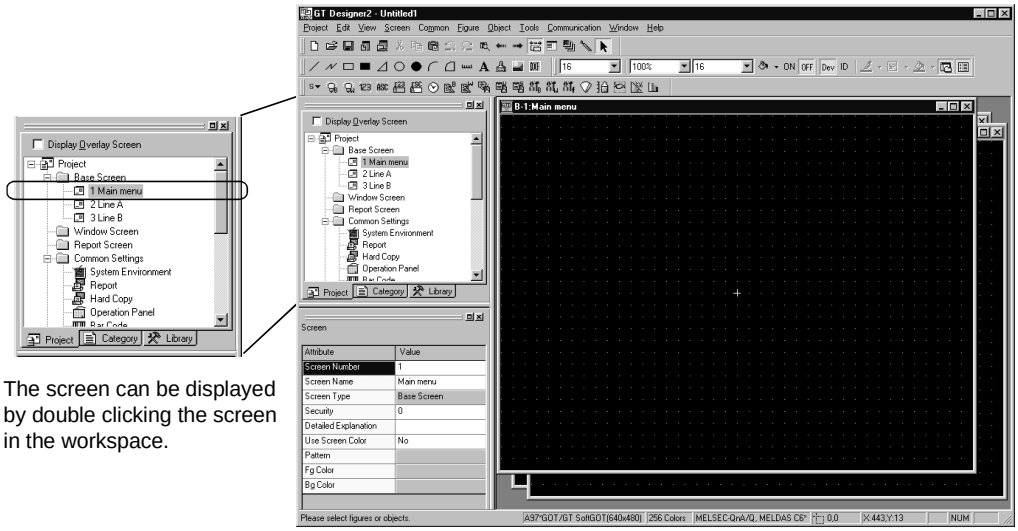


1 - 4

7 Quick selection of desired screen for editing ..... Item 4.6.1 Opening screen

Double click the screen in the project workspace to display the desired screen for editing.

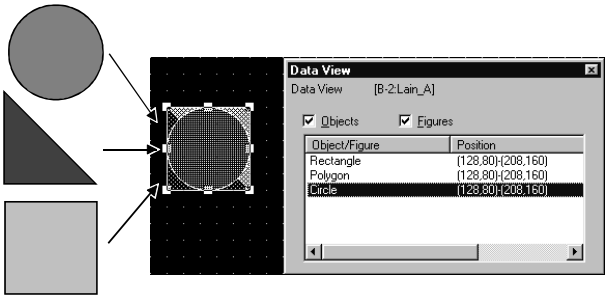




The screen can be displayed by double clicking the screen in the workspace.

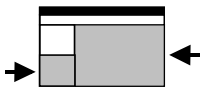
8 Quick selection of desired part for editing..... Item 9.1.5 Simple selection of overlapped figure

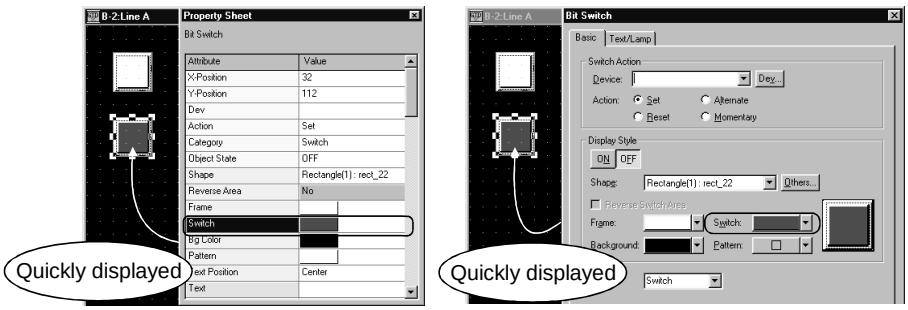
Objects or figures set on the screen can be displayed in a list.
If multiple objects or figures are overlapped, it can be simply selected from the data list.
Currently selected objects or figures can also be checked.



9 Real time check of settings in graphic display (view direct)

Setting on the property sheet or the dialog box is quickly displayed on the screen.
Since the screen display can be checked, a screen as you wish can be smoothly created.





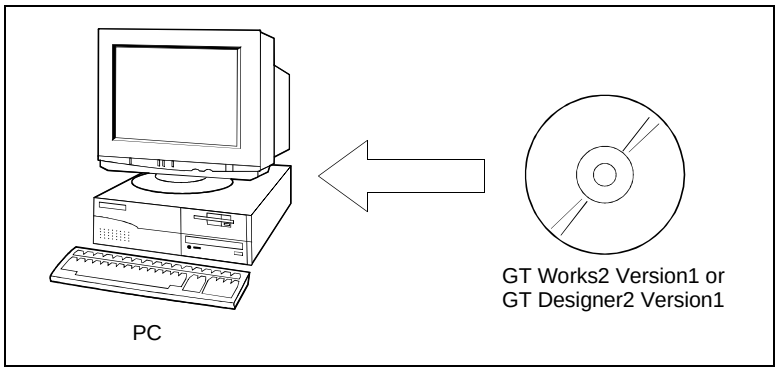
1 - 5

2. SYSTEM CONFIGURATION

2.1 System Configuration in Creating Monitor Screen

2.1.1 System configuration

The system configuration of GT Designer2 is shown below:



2.1.2 Operating environment

The operating environment of GT Designer2 is shown below:

Item		Details
PC		PC with Pentium® 200 MHz or more that allows operation of the OS below.
OS		Microsoft® Windows® 98 operating system Microsoft® Windows® Millennium Edition operating system Microsoft® WindowsNT® Workstation4.0 operating system ∗2 Microsoft® Windows® 2000 Professional operating system ∗2 Microsoft® Windows® XP Professional operating system ∗1 ∗2 Microsoft® Windows® XP Home Edition operating system ∗1 ∗2
Computer main unit		Refer to "Used Operating System and performance required for personal computer main unit" on the next page.
	CPU	
	Required memory	
Hard disk space		Installation: 250 MB or more Operation : 50 MB or more
Disk drive		CD-ROM disk drive
Display color		256 colors
Display		Resolution of 800 × 600 dots or more
Others		Installation of Internet Explorer Ver. 5.0 or later is required.

∗1 "Compatibility mode", "user's easy switching" and "desktop theme (font) change" are not supported.
∗2 The authority of the administrator is required when installing GT Designer2 into WindowsNT® Workstation4.0, Windows® 2000 Professional, Windows® XP Professional or Windows® XP Home Edition; when using GT Designer2 on Windows® XP Professional or Windows® XP Home Edition.

Point Regional Settings of Windows® control panel

Depending on the language of your Operating System, this software may not start. In such a case, start this software after setting the Regional Settings within Control Panel of Windows® to "English".

Used Operating System and performance required for personal computer main unit

Operating System	Performance required for personal computer main unit	
	CPU	Required memory
Microsoft® Windows® 98 operating system	Pentium® 200MHz or more	64MB or more
Microsoft® Windows® Me operating system	Pentium® 200MHz or more	64MB or more
Microsoft® WindowsNT® Workstation 4.0 operating system	Pentium® 200MHz or more	64MB or more
Microsoft® Windows® 2000 Professional operating system	Pentium® 200MHz or more	64MB or more
Microsoft® Windows® XP Professional operating system Microsoft® Windows® XP Home Edition operating system	Pentium II® 300MHz or more	128MB or more

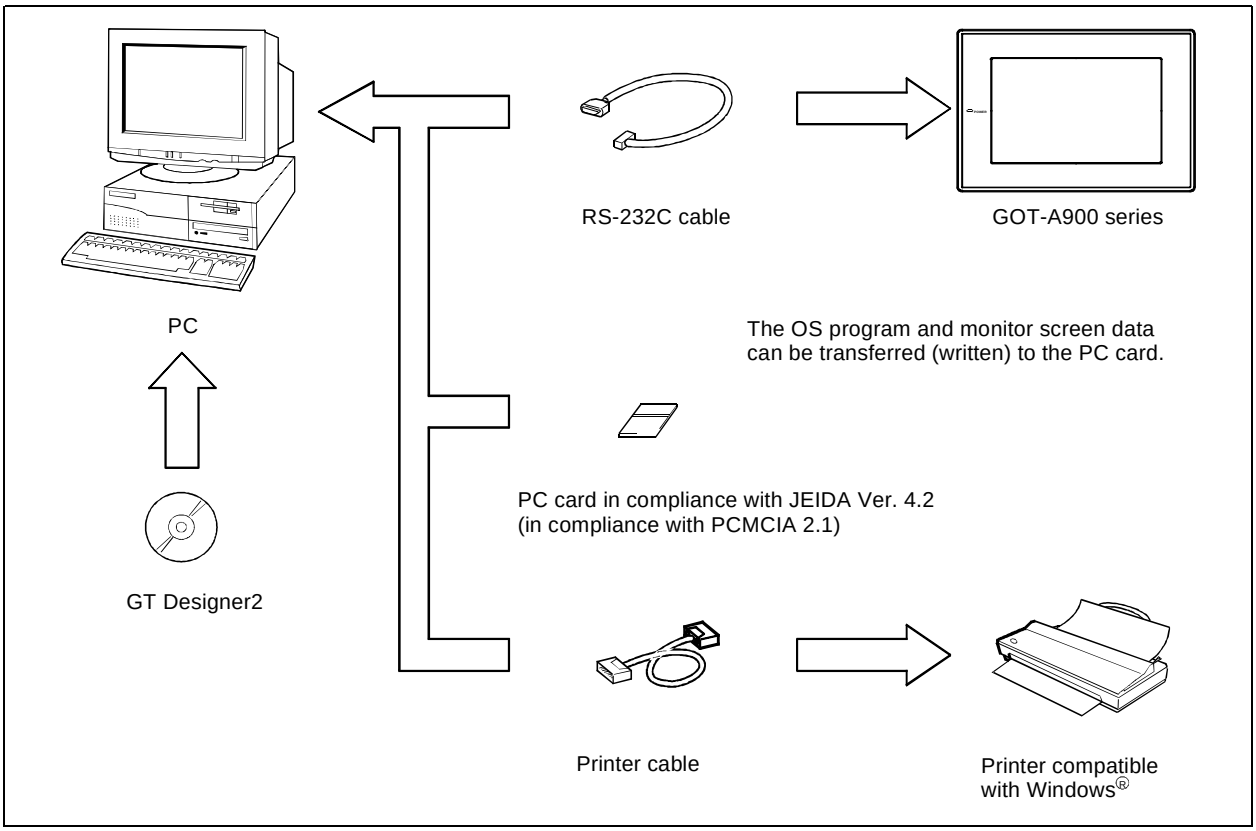
2 - 2

2.2 System Configuration of Data Transfer and Document Creation

2.2.1 System configuration

1 Using GOT-A900 series

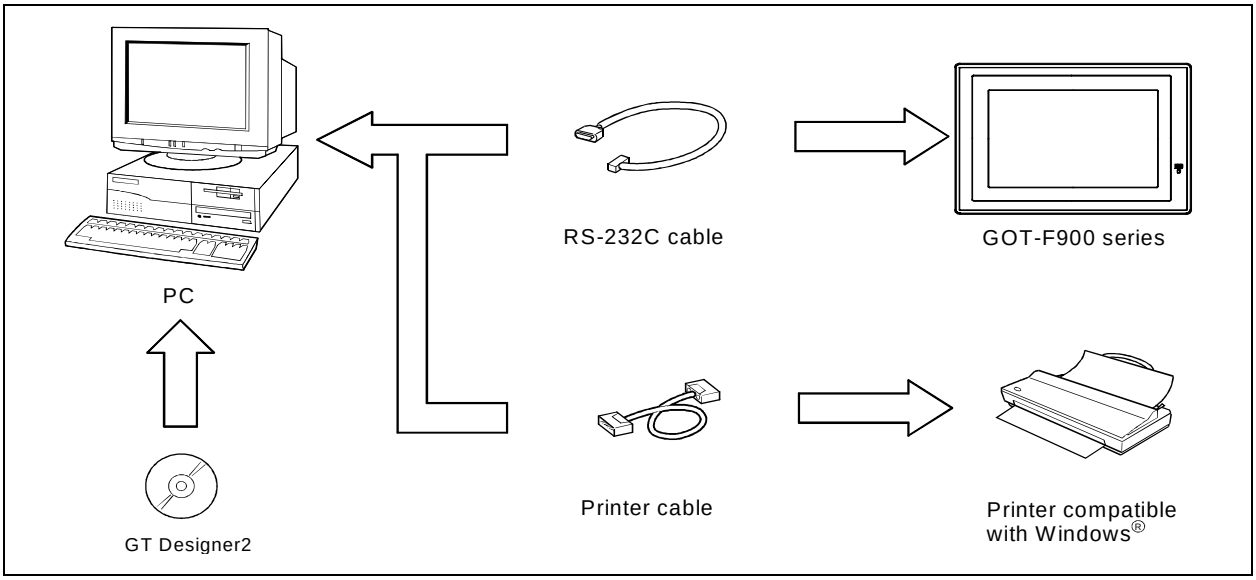
The system configuration using the GOT-A900 series is shown below.
Refer to Section 2.2.2 for the RS-232C cable.
Refer to the GOT user's manual (Details) for the PC card.



2 - 3

2 Using GOT-F900 series

The system configuration using the GOT-F900 series is shown below.
Refer to Section 2.2.2 for the RS-232C cable.



2 - 4

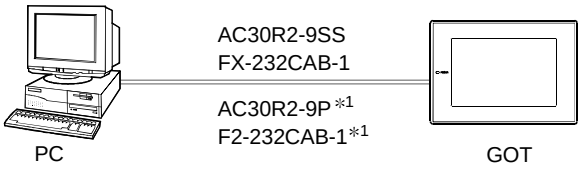
2.2.2 RS-232C cable to be used

The cable type for connection between the PC and the GOT and the connection diagram are shown below.

1 Using GOT-A900 series

The cable shown below or in the connection diagram is required.

(1) System configuration



∗1 9-25 pin converter (Diatrend Corp. D232J31) is required.

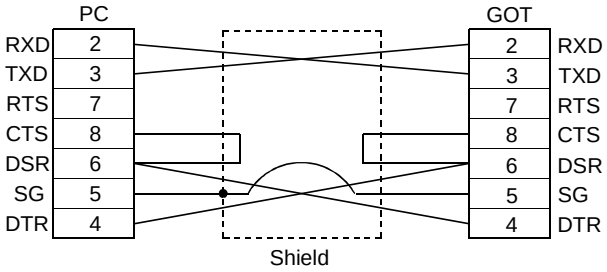
(2) Cable for use

Cable	Manufacturer
AC30R2-9SS (9 pin - 9 pin) FX-232CAB-1 (9 pin - 9 pin)	Mitsubishi Electric Corporation
AC30R2-9P (9 pin - 25 pin) F2-232CAB-1 (9 pin - 25 pin)	

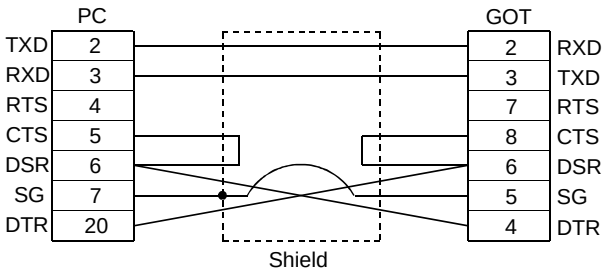
(3) Connection diagram

Use the screw-in type (inch screw) connector for the GOT.

(a) Connection diagram for cables equivalent to AC30R2-9SS and FX-232CAB-1



(b) Connection diagram for cables equivalent to AC30R2-9P and F2-232CAB-1

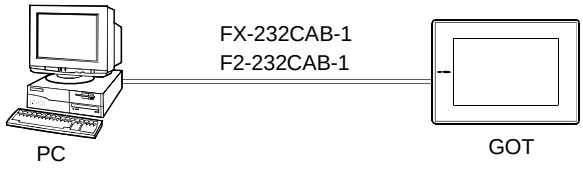


2 - 5

2 Using GOT-F900 series

The cable shown below or in the connection diagram is required.

(1) System configuration



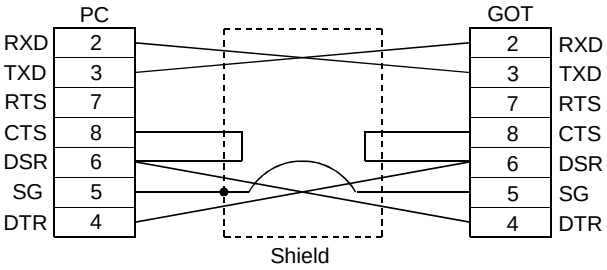
(2) Cable for use

Cable	Manufacturer
AC30R2-9SS (9 pin - 9 pin) FX-232CAB-1 (9 pin - 9 pin)	Mitsubishi Electric Corporation

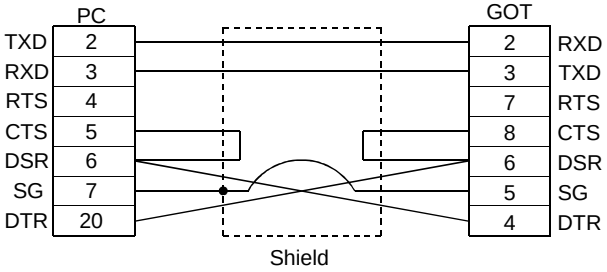
(3) Connection diagram

Use the screw-in type (inch screw) connector for the GOT.

(a) Connection diagram for cables equivalent to FX-232CAB-1.



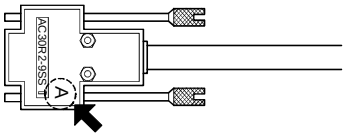
(b) Connection diagram for cables equivalent to F2-232CAB-1.



Point

(1) Cable to be used

The cable for the Version A or later cannot be used.
The RS-232C cable for the Version A or later has the version name at the upper right of the model on the connector. Check the version.



(2) Cable to be created

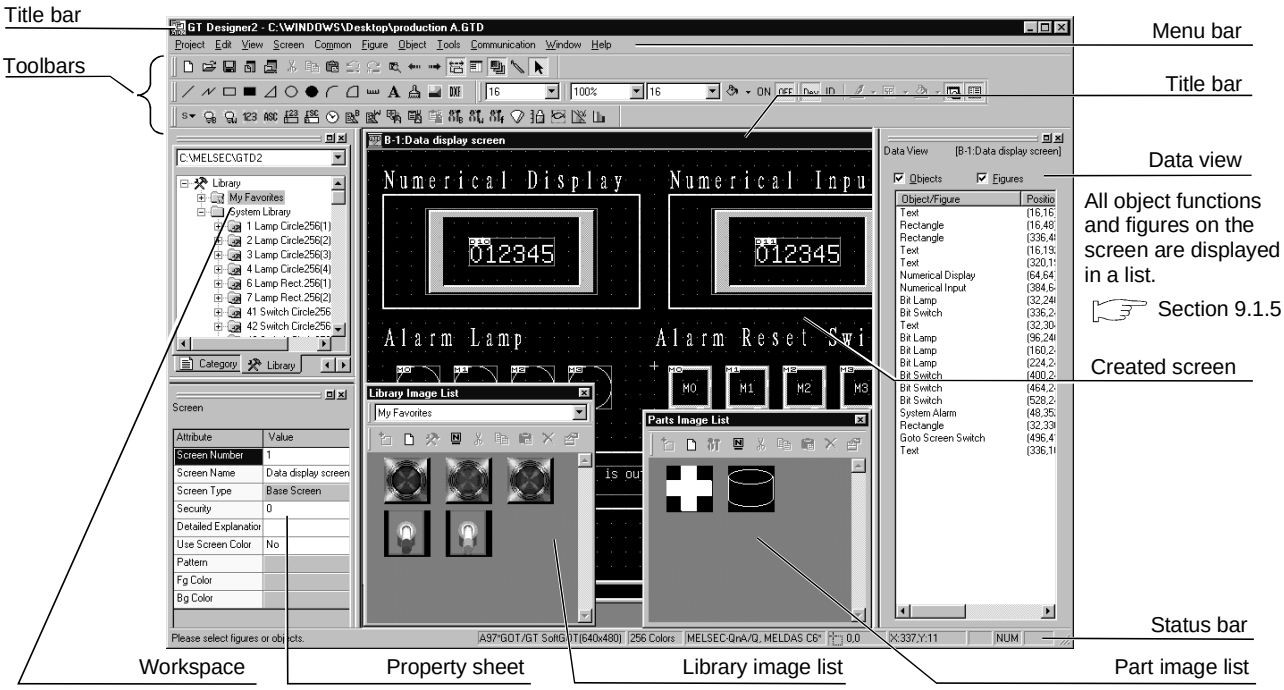
Use the F2-232CAB-1 connection cable when the PLC CPU and the GOT are used at the same time with FX-2PIF by connecting the F940GOT or the F930GOT to the A series CPU or the FX series CPU through the RS-422 cable.

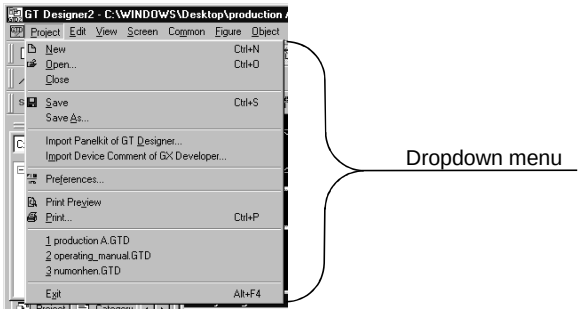
3. SCREEN CONFIGURATION OF GT DESIGNER2

3.1 Screen Configuration and Basic Operation

3.1.1 Screen configuration and various tools

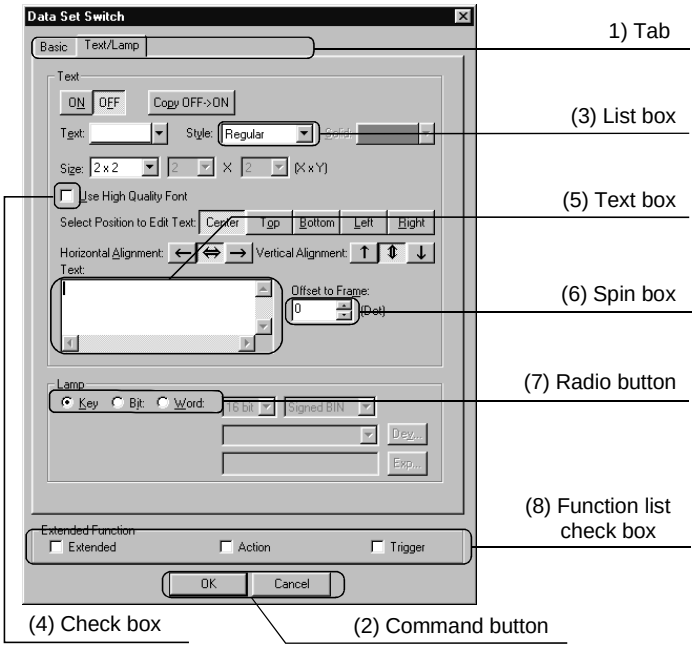
The screen configuration and various tools are described.

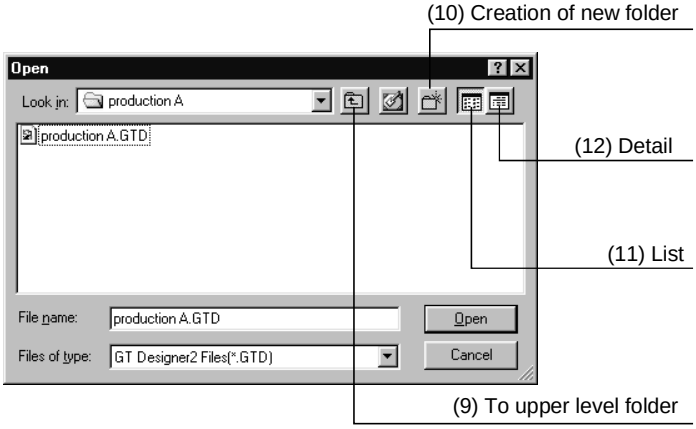

Title bar
Toolbars
Menu bar
Title bar
Data view
All object functions and figures on the screen are displayed in a list.
Section 9.1.5
Created screen
Status bar
Workspace
Property sheet
Library image list
Part image list
Settings on the overall project such as created screen and common settings are displayed in tree.
Section 3.1.3
Attributes of selected screen, objects and figures are displayed.
Settings can be made here.
Section 9.1.1
Library is displayed.
Objects/figures in library can be pasted.
Chapter 7
Parts used in the part display function are displayed.
GT Designer2 Version1 Reference Manual

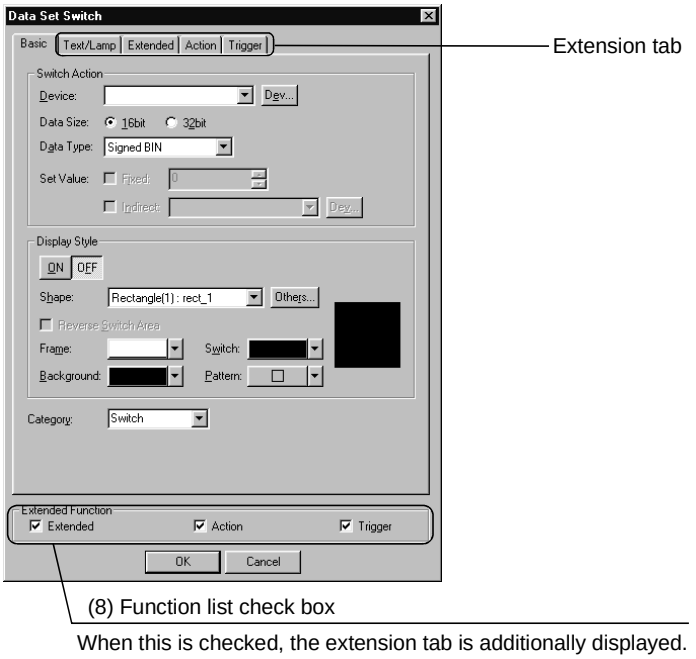


3 - 1

3.1.2 Basic operation of dialog box







(1) Tab
To switch the tab, click ▭.
When the function list check box is checked, the extension tab is additionally displayed.
The extension tab allows more detailed settings than the basic tab.

(2) Command button
Command buttons such as [OK] and [Cancel] are provided. Click each button to perform the item.

(3) List box
Click ▼ to display the selection list. Click the item for selection.

(4) Check box
To execute an item, click ☐ to put the ✓ mark.

(5) Text box
Input text from the keyboard.

(6) Spin box
Input the value directly or click ▲ ▼ to change the value.

(7) Radio button
Click ○ for the item to be selected.

(8) Function list check box
To display the extension tab, click ☐ to put the ✓ mark.

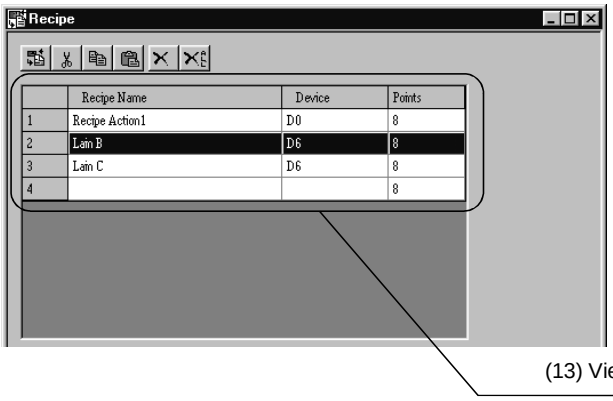
(9) Up One Level
One upper level than the current folder is displayed.

(10) Create New Folder
A new folder is created.

(11) List
The folders and files which are open currently are displayed in a list.

(12) Details
Details of the folders and files which are open currently are displayed.

3 - 2



(13)View of table

To select each item, click the left end of the table.

3 - 3

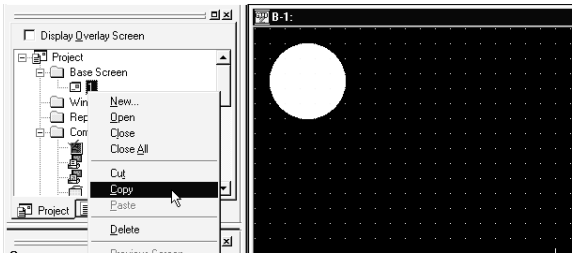
3.1.3 Operation of workspace

1 Workspace

The overall project settings are displayed in a tree by data type.
It is easy to manage and edit the overall project data.

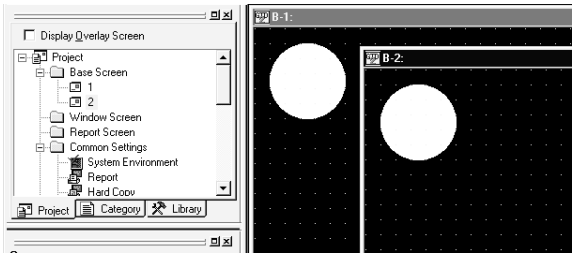
Ex. 1) Screen copy

The existing screen is copied using the workspace.



Select the copy source screen and right click on the mouse to select the [Copy] menu.

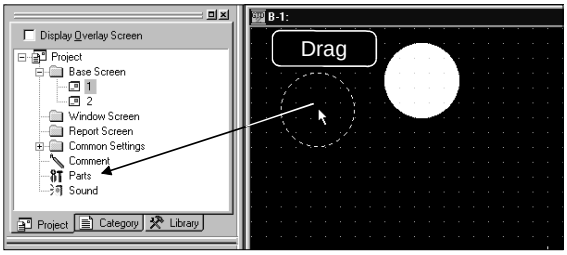
↓



Right click the mouse again to select the [Paste] menu.
When the screen property is set, the screen is copied.

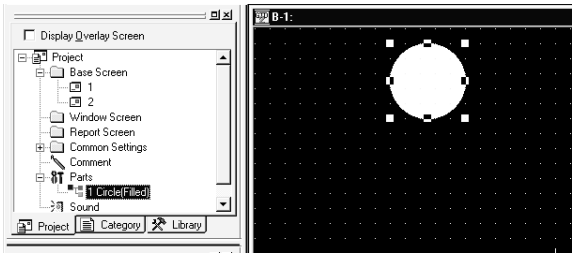
Ex. 2) Part registration

A figure is registered as a part using the workspace.



Select the figure for registration and drag it to the Parts folder in the workspace.

↓



When the part number and name are set, the figure is registered as a part.

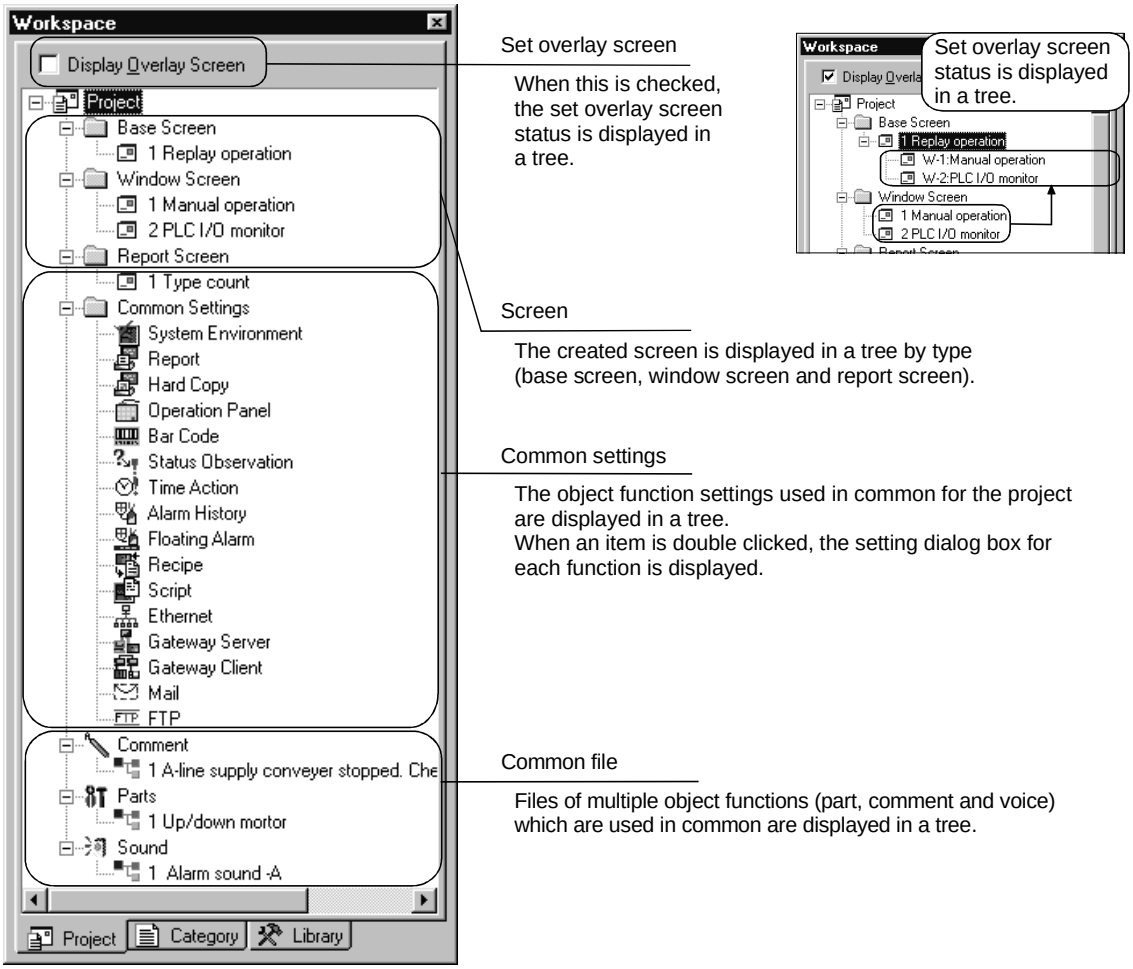
3 - 4

2 Workspace type

Types of the workspace are described here.

■ Project workspace

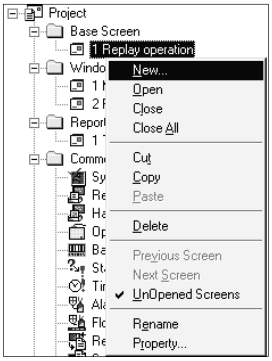
Overall project settings such as created screens and common settings are displayed in a tree.
It is convenient to see the project details, to check the work progress and to copy a screen.



Available functions

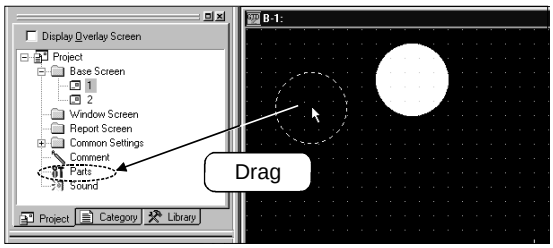
- Right click the mouse to select basic commands such as New Screen, Open or Copy.

  Ex.) Right click the window screen.



- Dragging a figure to the project workspace allows registration of a part.

  Ex.) Drag a figure.



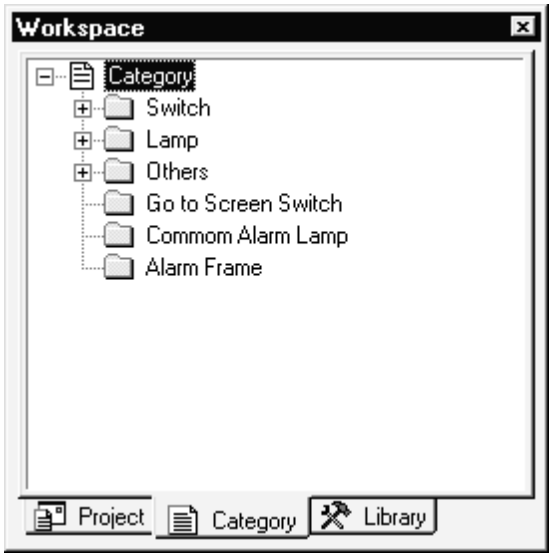
3 - 5

■ Category workspace

The overall project setting is displayed in a tree by category (type).

Classification for each application simplifies management and editing of objects.

☞ Section 9.1.2 Managing and batch changing objects/figures for each application



■ Library workspace

Objects or figures can be registered and pasted to the screen.

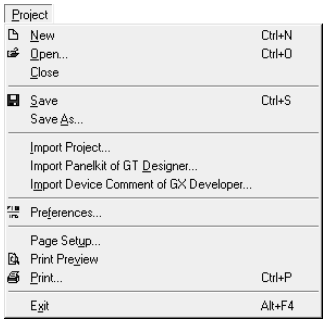
☞ Chapter 7 Using Library

3 - 6

3.2 Menu Configuration

Commands assigned to the menu bar are described.

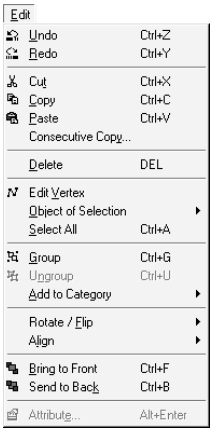
Project



The project menu contains functions of file management, preference settings and printing.

New creation of project, reading existing files, preference settings and printing of data being edited are available.
The recent file record can also be displayed.

Edit

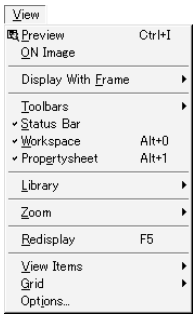


The edit menu contains edit functions for created figures/objects.

If incorrect operation is done during edit, the screen can be returned to the previous status. Copy, paste and grouping of objects and figures are also allowed.

☞ Chapter 8 Draw and edit

View

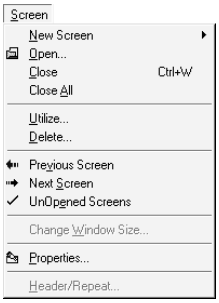


The view menu contains functions of display on the GT Designer2.

Toolbars, status bar, workspace or property sheet can be displayed or not displayed.

☞ Section 3.4.1 Customizing screen configuration

Screen

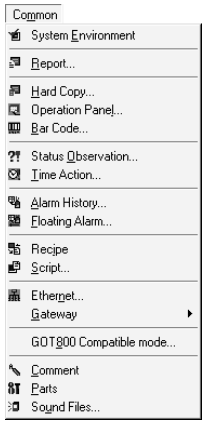


The screen menu contains functions of screen management and settings in a project.

New screen creation, opening/closing screen and change of window size are available.

Chapter 4 Creating and editing screen

Common



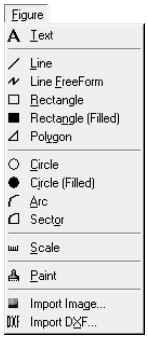
The common settings menu contains functions of common settings.

The object functions used for the overall project can be set. Comment, part and voice, etc. can also be registered.

Refer to the manual below for details of common settings.

GT Designer2 Version1 Reference Manual

Figure



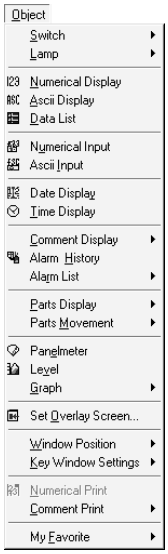
The figure menu contains functions of drawing figures.

Various figures can be drawn or figures can be filled. Image data can also be imported.

Chapter 8 Draw and edit

3 - 8

Object



The object menu contains functions of objects such as lamps or switches witch are arranged on the screen.

Refer to the manual below for details of each object functions.

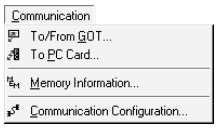
☞ GT Designer2 Version1 Reference Manual

Tools

The tool menu contains functions of list display of set devices and error check of setting items.
The data view can be displayed or not displayed.

☞ Chapter 9 Convenient function

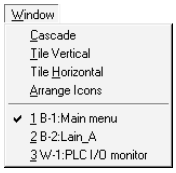
Communication



The communication menu contains functions of download, upload, display of GOT memory information and communication settings.

☞ Chapter 5 Data transfer operation

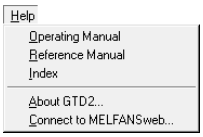
Window



The window menu contains functions of tiling multiple screens.

☞ Clause 4.7 Operating multiple screens

Help



The help menu contains functions of viewing the PDF manual related to the GT Designer2 and checking the software version.

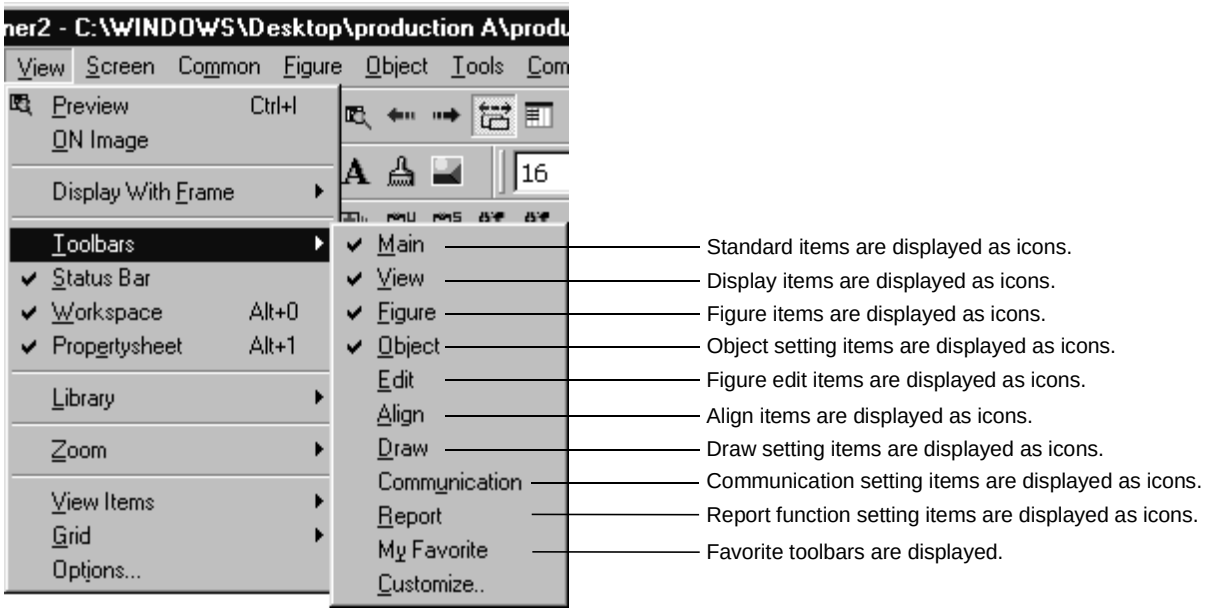
☞ Clause 3.6 How to use help

*The commands in this chapter is shown for the case of the largest display of the GOT-A900 series. For the GOT-F900 series, there are some differences for each model, and some models do not display all commands.

3.3 Toolbars

3.3.1 Types of toolbars

The following types of toolbars are available.
When desired toolbars are checked for display/non-display, the toolbars can be displayed/non-displayed accordingly.



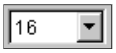
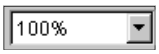
If you drag a displayed toolbar, it may be arranged as a window on the screen.
The following pages also describe details of each toolbar.

1 Main

Name	Description
New	New project file is created.
Open	Existing project file is opened.
Save project	Editing project is overwritten and saved on the existing file.
New Screen	New screen is created.
Open Screen	Specified screen is opened.
Cut	Figures and objects are cut.
Copy	Figures and objects are copied.
Paste	Figures and objects are pasted.
Undo	The last operation is cancelled to recover the status before change.
Redo	The last operation is repeated.
Screen Preview	Settings are displayed with the display image on the GOT.
Previous Screen	Screen with the number before the current screen number is opened.
Next Screen	Screen with the number next to the current screen number is opened.
Unopened Screens	Unopened screen is opened with "Previous/Next Screen" in the ascending/descending order.
Screen Device List	List of devices used is displayed.
Data View	All figures and objects arranged on the screen are displayed in a list.
Comment	Comment to be displayed with the object function is registered.
Figure and Object	Objection of selection is switched to "Figure and Object."

3 - 11

2 View

	Name	Description
	Snap	Snap movement of the cursor is set.
	Zoom	Screen display magnification rate/shrinkage rate is set.
	Grid Interval	Grid interval is set.
	Grid Color	Grid color is set.
	ON, OFF	Screen is switched to the display of device ON/device OFF.
	Device, Object ID	Device (Dev.) and object ID (ID) are displayed for each object.
	Screen Color	Screen background color is set.
	Screen Pattern	Screen background pattern is set.
	Screen Background Color	Screen background color is set.
	Workspace	Workspace is displayed.
	Property sheet	Property sheet is displayed.

3 - 12

3 Figure

Name	Description
Line	Line is drawn.
Line FreeForm	Continuous line is drawn.
Rectangle	Rectangle is drawn.
Rectangle (Filled)	Filled rectangle is drawn.
Polygon	Polygon is drawn.
Circle	Circle is drawn.
Circle (Filled)	Filled circle is drawn.
Arc	Arc is drawn.
Sector	Sector is drawn.
Scale	Scale is drawn.
Text	Text is input.
Paint	Polygon and closed area are painted with the selected pattern.
Import Image	BMP format file is imported on the editing screen.
Import DXF	DXF format file is imported on the editing screen

3 - 13

4 Object

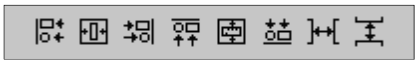
Name	Description
Switch	Touch switch function is set.
Bit Lamp	Bit lamp function is set.
Word Lamp	Word lamp function is set.
Numerical Display	Numerical display function is set.
ASCII Display	ASCII display function is set.
Numerical Input	Numerical input function is set.
ASCII Input	ASCII input function is set.
Time Display	Time display function is set.
Bit Comment	Bit comment function is set.
Word Comment	Word comment function is set.
Alarm History	Alarm history function is set.
User Alarm	Alarm list function (User Alarm) is set.
System Alarm	Alarm list function (System Alarm) is set.
Bit Parts Display	Bit parts display function is set.
Word Parts Display	Word parts display function is set.
Fixed Parts Display	Fixed parts display function is set.
Panel meter	Panel meter function is set.
Level	Level function is set.
Trend Graph	Trend graph function is set.
Line Graph	Line graph function is set.
Bar graph	Bar graph function is set.

3 - 14

5 Edit

Name	Description
Bring to Front	Selected figures and objects are arranged to front.
Bring to Back	Selected figures and objects are arranged to back.
Group	Selected figures and objects are grouped.
Ungroup	Grouping is canceled.
Flip Horizontal	Selected figure is flipped horizontally.
Flip Vertical	Selected figure is flipped vertically.
Rotate Left	Selected figure is rotated 90 degrees to the left.
Rotate Right	Selected figure is rotated 90 degrees to the right.
Edit Vortex	Length of freeform line or polygon line is changed.
Align	Selected figures and objects are aligned.
Figure	Only figures are selected.
Object	Only objects are selected.
Figure and Object	Figures and objects are selected.

6 Align



Name	Description
Align Left	Aligned with the selected leftmost figure or object.
Align Center (Horizontally)	Aligned at the center horizontally.
Align Right	Aligned with the selected rightmost figure or object.
Align Top	Aligned with the selected uppermost figure or object.
Align Center (Vertically)	Aligned at the center vertically.
Align Bottom	Aligned with the selected lowermost figure or object.
Align Across (Horizontally)	Selected figures and objects are evenly aligned in the horizontal direction.
Align Vertical (Vertically)	Selected figures and objects are evenly aligned in the vertical direction.

3 - 15

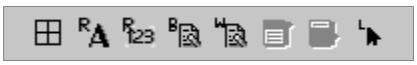
7 Draw

Name	Description
Line Style	Line style is set or changed.
Line Width	Line width is set or changed.
Line/Border Color	Line color is set or changed.
Fill Pattern	Fill pattern is set or changed.
Pattern Color	Fill color is set or changed.
Pattern Background	Fill background color is set or changed.
Text Color	Text color is set or changed.
Text Style	Text style is set or changed.
Solid Text	Text solid color is set or changed.

8 Communication

Name	Description
Communication with GOT	Data is transferred to GOT.
Communication with Card	Data is transferred to PC Card.
Communication Configuration	Communication setting is made

9 Report

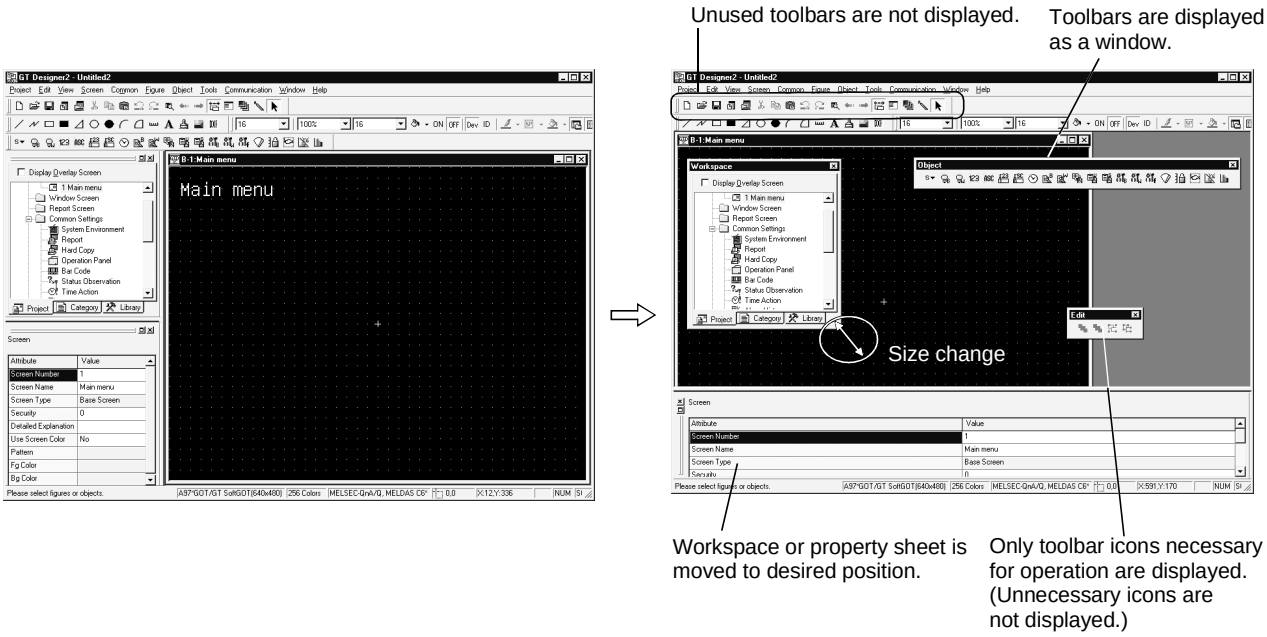


Name	Description
Report Line	Report line (Rectangle) is drawn.
Report Text	Report text is input.
Numerical Print	Numerical value for report printing is set.
Bit Comment Print	Comment (Bit) for report printing is set.
Word Comment Print	Comment (Word) for report printing is set.
Report Repeat Header	Header line is set.
Report Repeat Line	Repeat line is set.
Selection Report Line	Only report lines are selected.

3 - 16

3.4 Customizing Screen Configuration and Toolbars

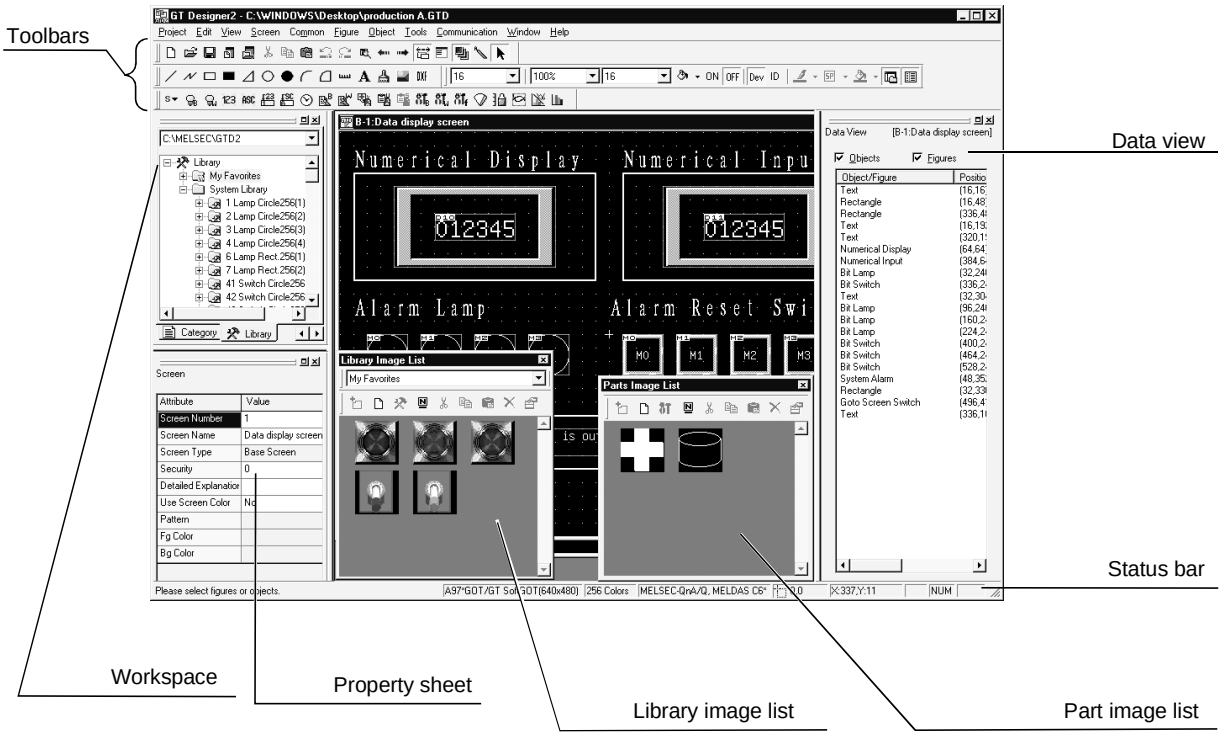
Screen configuration and toolbars can be customized on the GT Designer2 to facilitate operation by users.
Screen configuration and toolbars customizing methods are described in this section.


Unused toolbars are not displayed.
Toolbars are displayed as a window.
Main menu
Size change
Workspace or property sheet is moved to desired position.
Only toolbar icons necessary for operation are displayed. (Unnecessary icons are not displayed.)

3 - 17

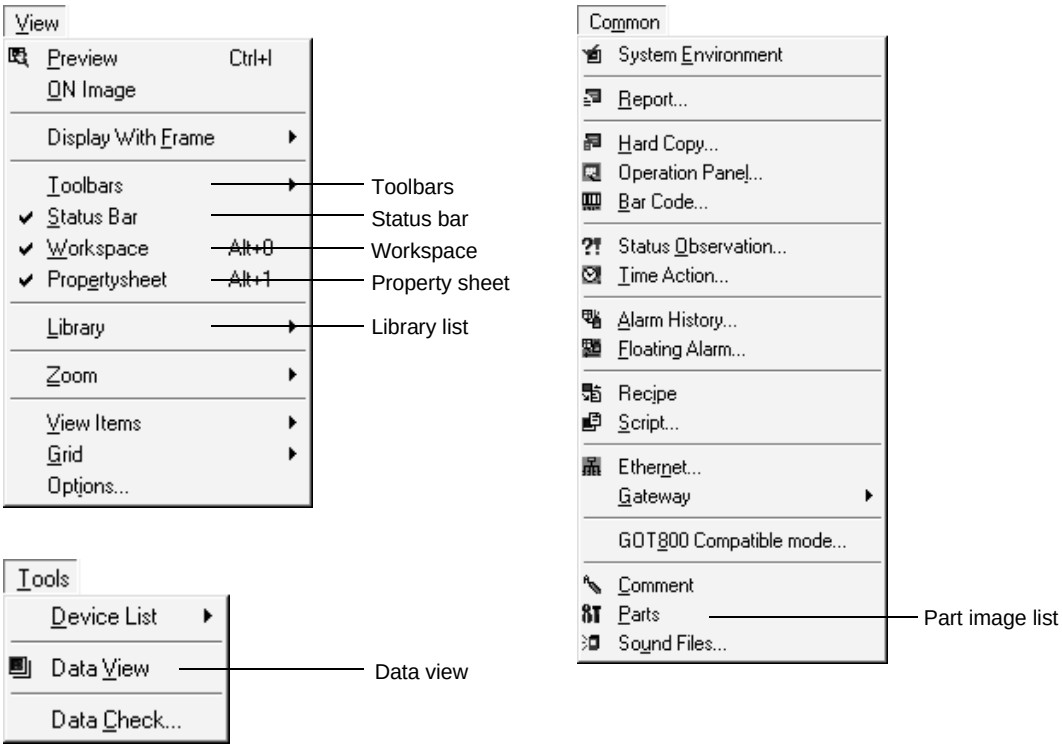
3.4.1 Customizing screen configuration

Display/non-display of tools, size change and display position change are available.
The areas shown below can be customized.



1 Display/non-display

Click the options in the menu below to display/non-display various tools.



3 - 18

2 Size change

Click the buttons below to change the screen size:

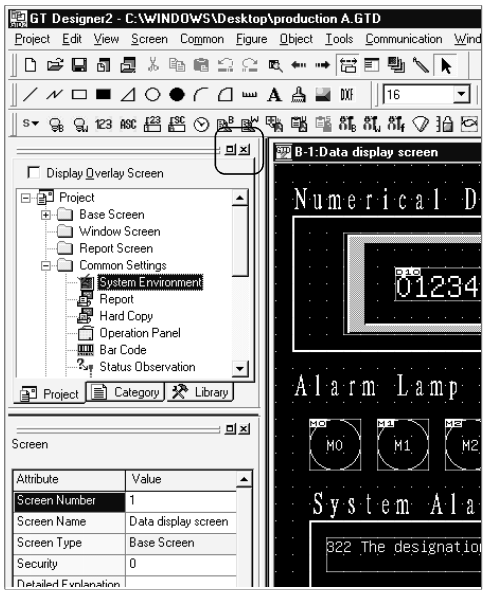
: The selected screen is minimized. : The selected screen is returned to the original size.

: The selected screen is maximized. : The selected screen is closed.

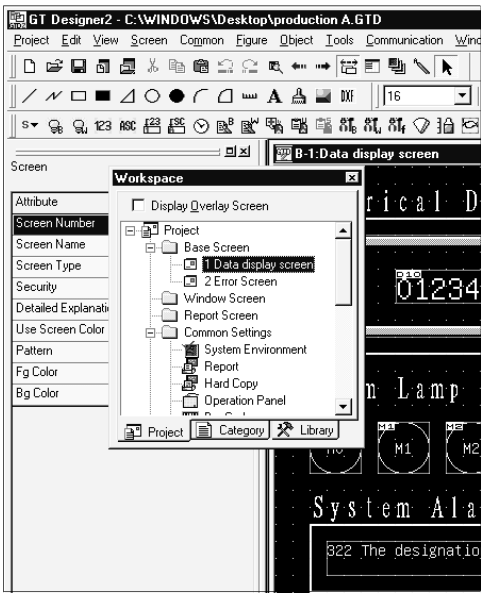
Click to pop up the workspace, property sheet and data view.

(Ex.) Moving or changing size of workspace

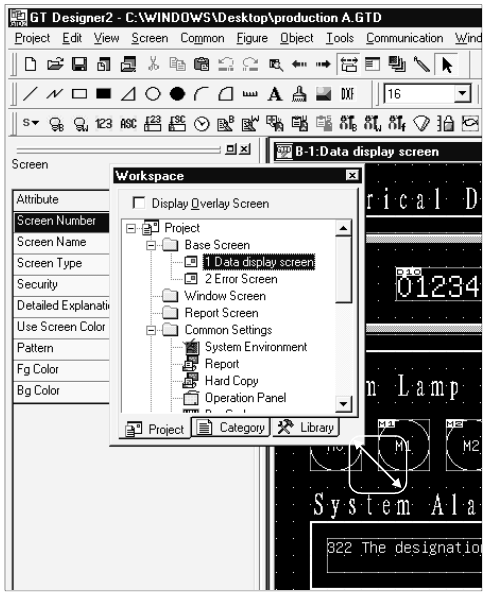
1 Click .



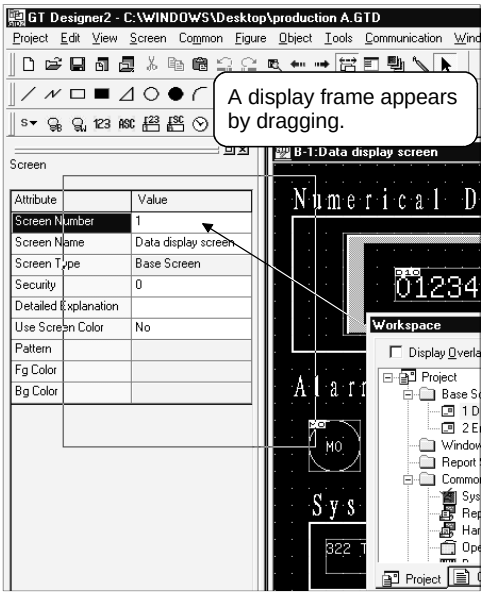
2 The workspace pops up as a window.



3 Change the window size of the workspace. (Toolbars size cannot be changed.)



4 When it is dragged to the original position, full display can be recovered.



Remark Customized screen

The GT Designer2 memorizes the customized settings of the screen configuration. At the next start-up, the previously customized status screen is displayed.

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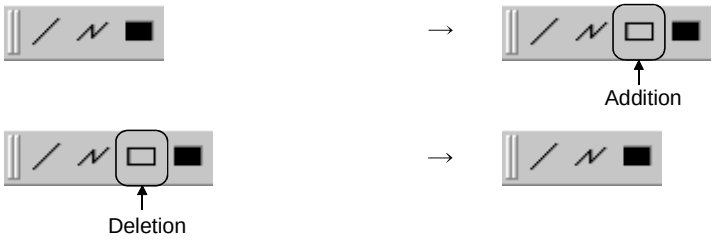
3.4.2 Customizing toolbars

Display image of icons can be changed and icons/toolbars can be added or deleted.

(Ex. 1) Deletion of toolbars

(Ex. 2) Addition/deletion of icon



(Ex. 3) Movement of icon

(Ex. 4) Icon grouping with partition

3 - 20

1 Adding or deleting toolbars/icons

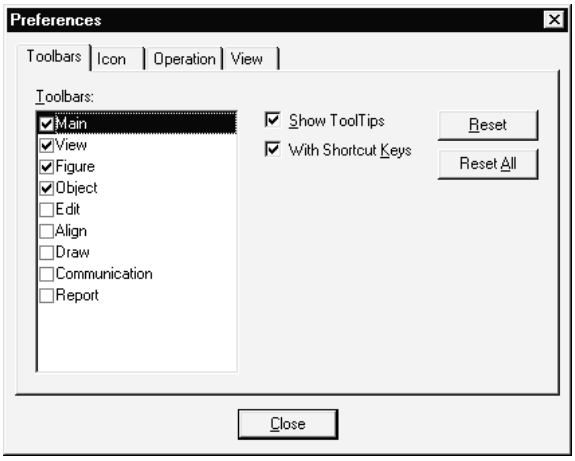
Methods of adding or deleting toolbars/icons are shown below:

1. Select [Project] → [Preferences].
2. The preferences dialog box appears.

   Add or delete toolbars/icons with the toolbar tab or the command tab.

■ Toolbars tab

Toolbars are added or deleted.

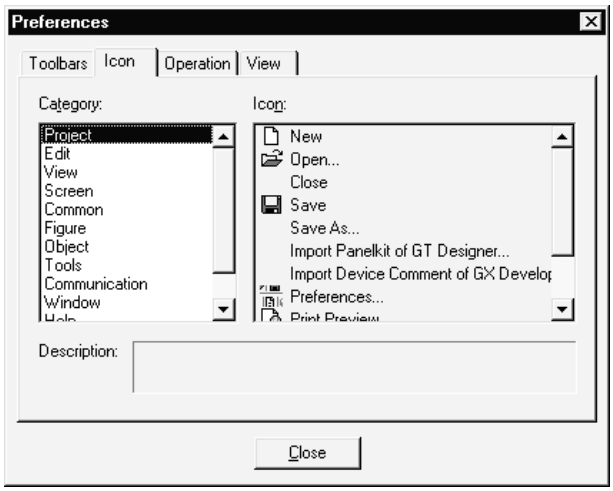


Item	Description	A	F
Toolbars	Check the desired toolbars for addition. To delete it, remove the check.	○	○
Show Tool Tips	When the cursor is placed on the icon, check this to display the icon name.	○	○
With Shortcut Keys	When the cursor is placed on the icon, check this to display the shortcut key. (It is effective only when the "Show Tool Tips" is displayed.)	○	○
Reset	Only the selected toolbars are set to default status.	○	○
Reset All	All toolbars are set to default status.	○	○

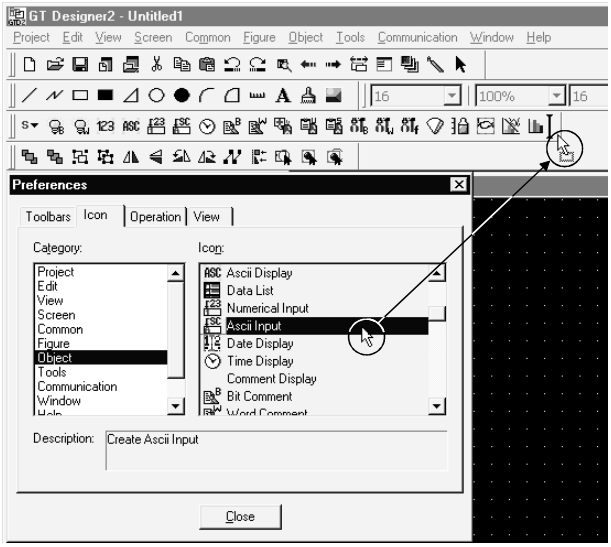
3 - 21

■ Command tab

Icons are added, deleted or moved with the procedures below:

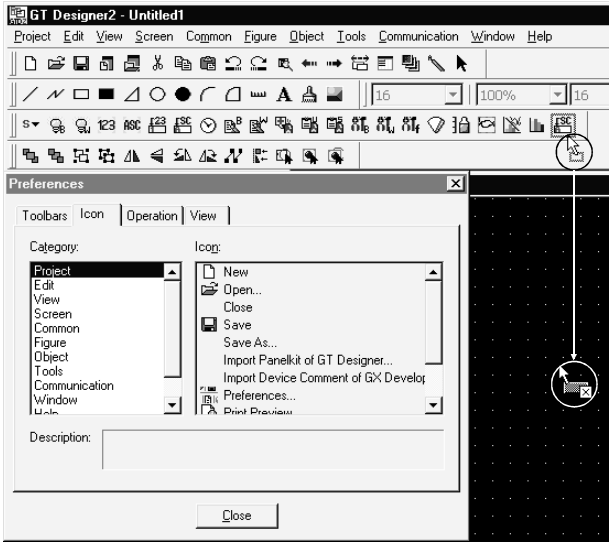


(Ex. 1) Adding icon



Click the desired function for addition and drag it to the desired toolbar.

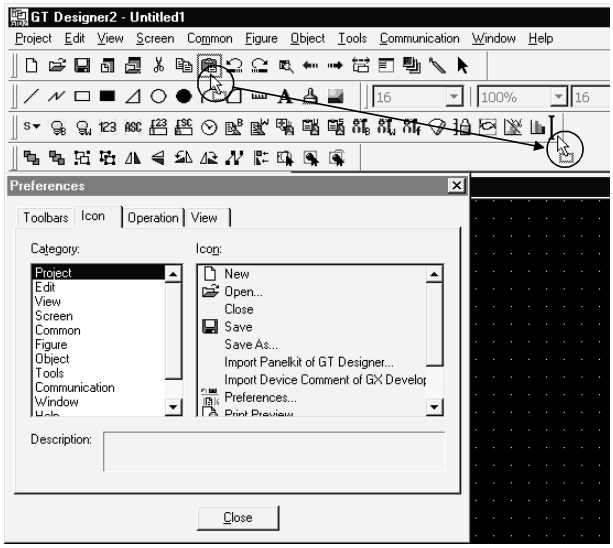
(Ex. 2) Deleting icon



Click the desired icon for deletion and drag it outside the toolbar.

3 - 22

(Ex. 3) Moving icon



Select the desired icon for movement and drag it to the desired position.

3 When the toolbars are changed, click the Close button.

Hint!

Deleting icon and inserting partition

While the preferences dialog box is open, select the icon and right click the mouse to delete icon or to insert partition.

Delete : Delete the selected icon.

Start Group : Insert a partition at the left of the icon.
It is convenient to group with icons.
When all icons at the right of the partition are deleted, the partition is deleted as well.

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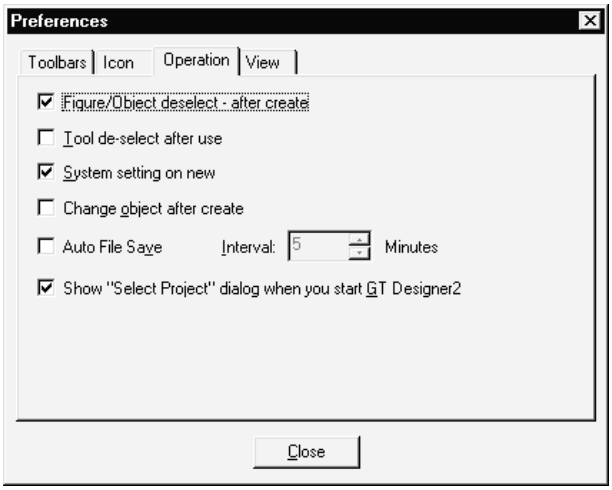
3.4.3 Customizing GT Designer2 operating environment

Environment for the drawing screen is set.

1. Select [Project] - [Preferences] menu.
2. The preferences dialog box appears.
   The drawing screen environment is set with operation tab/display tab items.

1 Operation tab

Operation setting for drawing screen is made.

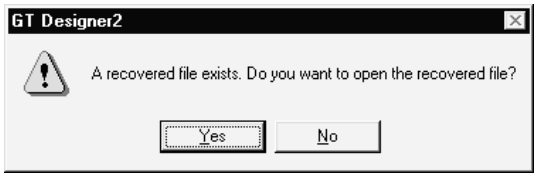


Item	Description	A	F
Figure/object deselect-after create	Checked : After arranging objects, the selected status (status with handle) is reset. Not checked : With the selected status (status with handle), figures/objects are arranged on the drawing screen.	○	○
Tool de-select after use	Checked : After setting figures/objects, the tool selected status is reset. It is convenient to arrange different figures/objects. Not checked : After setting figures/objects, the selected status remains active. It is convenient to arrange the same figures/objects continuously.	○	○
System setting on new	Checked : The system settings dialog box (GOT type, PC type, etc.) appears in creation of a new project. Not checked : The system settings dialog box (GOT type, PC type, etc.) does not appear in creation of a new project.	○	○
Change object after create	Checked : After arranging objects on the drawing screen, the settings dialog box automatically appears. Not checked : After arranging objects on the drawing screen, the settings dialog box does not automatically appear.	○	○
Auto File Save	Checked : File is automatically saved. Saving interval (5 to 720) is set. Not checked : File is not automatically saved.	○	○
Show "Select Project" dialog when you start GT Designer2	Checked : When the GT Designer2 is started, the project selection dialog box (New, Open, etc.) appears. Not checked : When the GT Designer2 is started, the project selection dialog box (New, Open, etc.) does not appear.	○	○

Point

(1) Operation in automatic save setting

If the GT Designer2 stops or a power failure occurs in automatic save setting, the GT Desinger2 shows the dialog box below at the next start-up.



- If a project file is available (a project is saved in the past), this dialog box appears when the project file is opened.
- If a project file is not available (no saving after new creation), this dialog box appears when the GT Designer2 is started.

When [Yes] is selected on the dialog box above, the automatically saved file is recovered.

When either [Yes] or [No] is selected, the automatically saved recovery file is erased.
It is recommended to select [Yes] and to check that the saved recovery file is necessary.

(2) Precautions for multiple start of GT Designer2 with automatic save setting

When automatic save is set, do not perform the following operations.
The message in (1) above appears at the start-up of the 2nd or subsequent GT Desinger2 and the automatically saved file is then erased.
Reset the automatic save for the following operations:

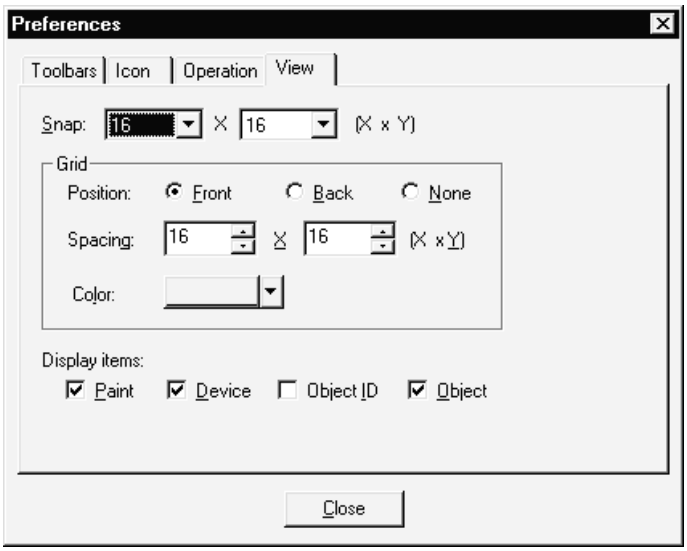
(a) After new creation, start the 2nd or subsequent GT Designer2 while editing a project which has not been saved at all.

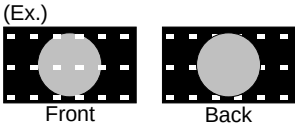
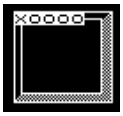
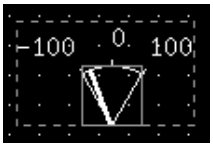
(b) Open the project which has been opened on the GT Designer2 with the 2nd or subsequent GT Designer2.

3 - 25

2 View tab

Display for the drawing screen is set.



Item		Description	A	F
Snap ∗1		Dot value (1, 2, 4, 8 or 16) is selected for automatic arrangement of figures or objects on the screen.	○	○
Grid	Position	Position of grid display is selected. Front: Grid is displayed at the front of the screen. Back: Grid is displayed at the back of the screen. None: Grid is not displayed. (Ex.)  Front Back	○	○
	Spacing	Grid spacing (2 to 64 dots) is set.	○	○
	Color	Grid display color is selected.	○	○
Display items		Items displayed on the GT Designer2 are checked.	○	○
	Paint	When a closed figure is filled with "Paint," this item is selected to display the filled status. (Ex.) Filling in white	○	○
	Device	This item is selected to display the device name set in the object. (Ex.) x 1000 	○	○
	Object ID	This item is selected to display the object ID of each object. The object ID is automatically put on each object. It is convenient to display the object ID in setting the system information. Refer to the manual below for details of system information. ☞ GT Designer2 Version 1 Reference Manual (Ex.) 10000	○	○
	Object	This item is selected to display the set object. (Ex.) Display of level 	○	○

Refer to the next page for details of ∗1.

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＊1 Snap

Figures and objects are arranged with the dot value set in "Snap."

(Ex.)

Drawing a rectangle ([Snap] is set to 16 dots.)

1 Determine the start point by clicking. → 2 Actual start position

Cursor position
(X=10, Y=12)

It is arranged at the closest position to the coordinates of multiples of 16. (X=16, Y=16)

(a) When the end point is determined, the cursor can only moved to the coordinates of multiples of 16.

(b) When an object display position is determined or a figure is moved, the cursor moves based on the dot value set in [Snap] as shown above.

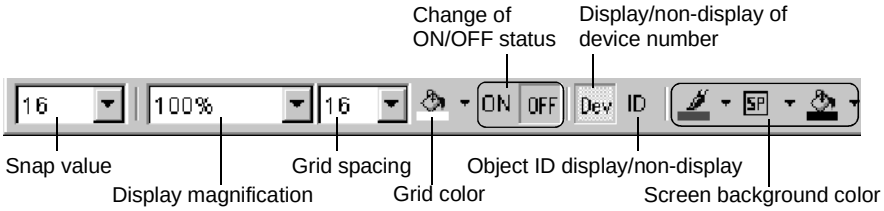
(c) One stroke of the ← key, ↑ key, ↓ key and → key on the keyboard moves the cursor in the units of the set dot value.
Set the [Snap] to one dot each and hit ← key, ↑ key, ↓ key and → key each time on the keyboard to move the cursor 1 dot each. This facilitates drawing a fine figure or position setting.

Hint!

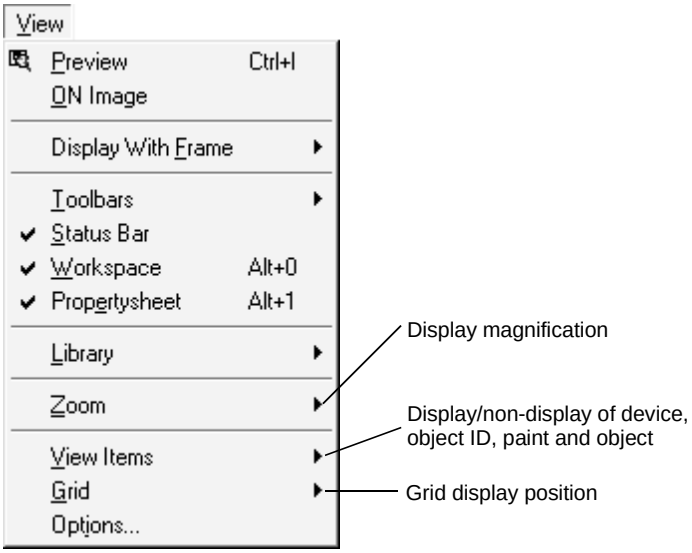
Display change from toolbars and menu

Items set on the display tab can be changed from toolbars and menu.

(1) Changing drawing screen display from toolbars (display setting)



(2) Changing drawing screen display from menu



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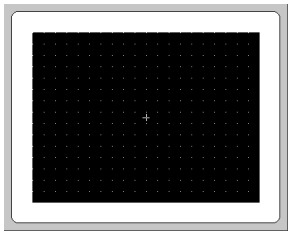
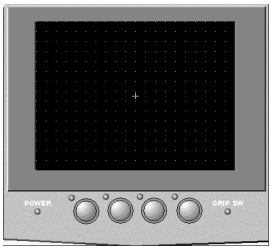
3.4.4 Display with frame

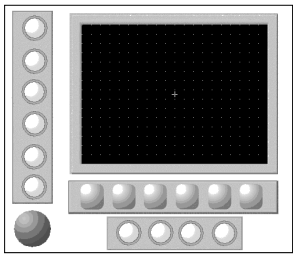
It is the function to display the outer frame on the drawing screen as if the GOT body frame is imaged. With this function, a screen can be created with the image of the GOT body.



Standard



Handy



ET

Keypad

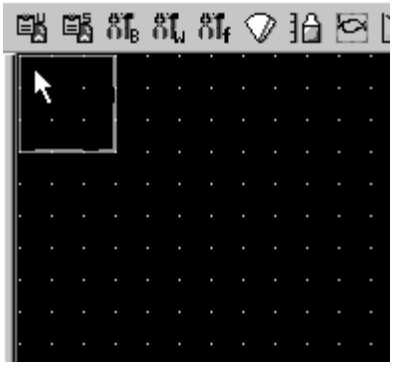
Standard ..... Selectable on all GOT (except F920GOT (128 × 64)).
(This is not displayed on the GT SoftGOT.)
Handy..... Selectable when the GOT type is set to A95∗GOT (320 × 240) or F94∗GOT (320 × 240).
ET ..... Selectable when the GOT type is set to A94∗GOT (320 × 240).
Keypad..... Selectable when the GOT type is set to A920∗GOT (128 × 64) or A930∗GOT (240 × 80).

1. Select [View] → [Display with Frame] → [Standard]/[Handy]/[ET]/[Keypad] menu.
2. The frame is displayed according to the selected option.

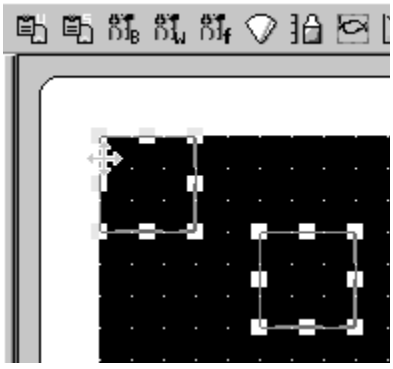
1 Standard

This function allows an image of the GOT body on the drawing screen.
It is easy to edit a figure at an screen end.

No frame



With frame



2 Handy, ET and Keypad

This function allows an image of the GOT body on the drawing screen.
When a switch or an LED on the body image is clicked, device assignment for the operation switch LED or the function switch and switch function for the function switch can be set.
It is easy to edit a figure at an screen end.

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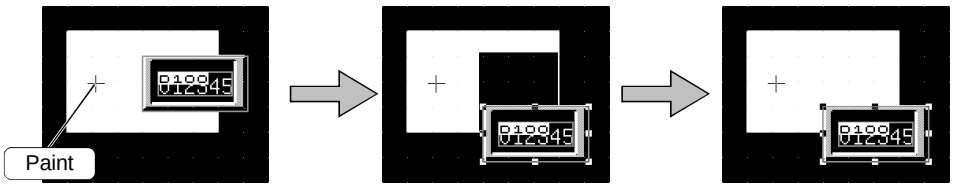
3.4.5 Redisplaying drawing screen

If paint is used, unpainted areas may occur.
Redisplay provides correct display.

Ex.) Moving an object on paint



Move an object on pain. The figure shows unpainted areas. Refresh the display with [View] → [Redisplay] menu.

1. Select the [View] -> [Redisplay] menu.
2. Display the drawing screen correctly.

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3.5 How to Use Help

Help is used for referring to the GT Designer2-relevant manual (PDF format) and confirming the software version.

Point Before viewing PDF format manual

Acrobat Reader must be installed to view PDF format manual

1 Operation method

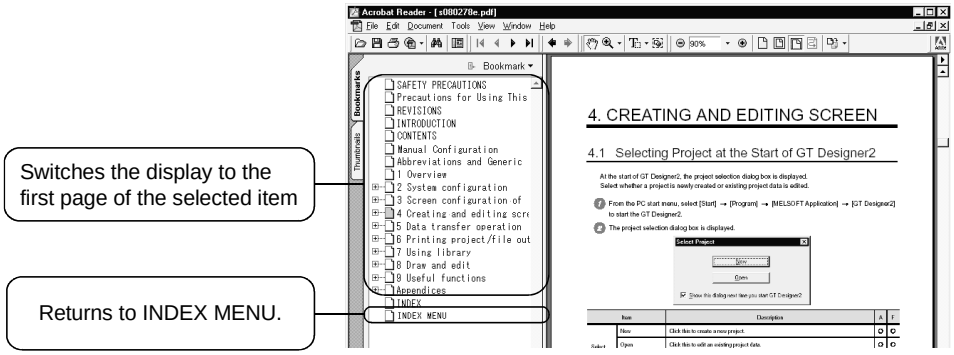
1 Click on each menu item under [Help].

Item	Description
[Operating Manual]	This item is used for referring to GT Desginer2 Version1 operating manual.
[Reference Manual]	This item is used for referring to GT Designer2 Version1 reference manual.
[Index]	This item is used for viewing a PDF manual.
[About GTD2…]	This item is used for confirming the GT Designer2 version.
[Connect to MELFANSweb…]	This item is used for connecting to the MITSUBISHI ELECTRIC FA NETWORK SERVICE ON WORLD WIDE, MELFANSweb homepage

2 PDF manual viewing procedure (When [Operating Manual]/ [Reference Manual] is selected.)

1 The selected manual is displayed.

(Refer to the HELP of Acrobat Reader for details of Acrobat Reader operation.)
Manual list is displayed by clicking on INDEX MENU. (3 1 in this section)



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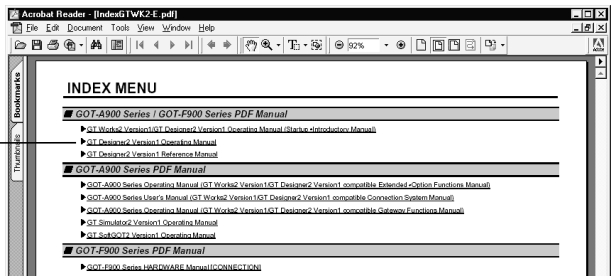
3 PDF manual viewing procedure (When [Index] is selected.)

1 After operating 1, following screen is displayed. Click on the desired manual.

Click

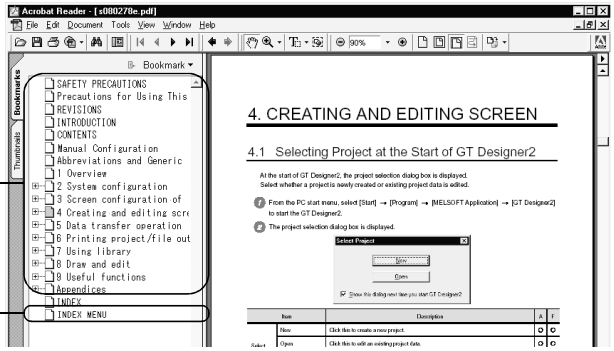

Acrobat Reader - [IndexGTWK2-E.pdf]
File Edit Document Tools View Window Help
Bookmarks
Thumbnails
INDEX MENU
GOT-A900 Series / GOT-F900 Series PDF Manual
GT Works2 Version1/GT Designer2 Version1 Operating Manual (Startup-Introductory Manual)
GT Designer2 Version1 Operating Manual
GT Designer2 Version1 Reference Manual
GOT-A900 Series PDF Manual
GOT-A900 Series Operating Manual (GT Works2 Version1/GT Designer2 Version1 compatible Extended •Option Functions Manual)
GOT-A900 Series User's Manual (GT Works2 Version1/GT Designer2 Version1 compatible Connection System Manual)
GOT-A900 Series Operating Manual (GT Works2 Version1/GT Designer2 Version1 compatible Gateway Functions Manual)
GT Simulator2 Version1 Operating Manual
GT SoftGOT2 Version1 Operating Manual
GOT-F900 Series PDF Manual
GOT-F900 Series HARDWARE Manual (CONNECTION)

2 The selected manual is displayed.

(Refer to the HELP of Acrobat Reader for details of Acrobat Reader operation.)

Switches the display to the first page of the selected item

Returns to INDEX MENU.


Acrobat Reader - [s080278e.pdf]
File Edit Document Tools View Window Help
Bookmarks
Thumbnails
Bookmark
SAFETY PRECAUTIONS
Precautions for Using This
REVISIONS
INTRODUCTION
CONTENTS
Manual Configuration
Abbreviations and Generic
1 Overview
2 System configuration
3 Screen configuration of
4 Creating and editing scr
5 Data transfer operation
6 Printing project/file out
7 Using library
8 Draw and edit
9 Useful functions
Appendices
INDEX
INDEX MENU
4. CREATING AND EDITING SCREEN
4.1 Selecting Project at the Start of GT Designer2
At the start of GT Designer2, the project selection dialog box is displayed.
Select whether a project is newly created or existing project data is edited.
From the PC start menu, select [Start] → [Program] → [MELSOFT Application] → [GT Designer2] to start the GT Designer2.
The project selection dialog box is displayed.
Select Project
New
Open
Item
Description
New
Click this to create a new project.
Open
Click this to edit an existing project data.

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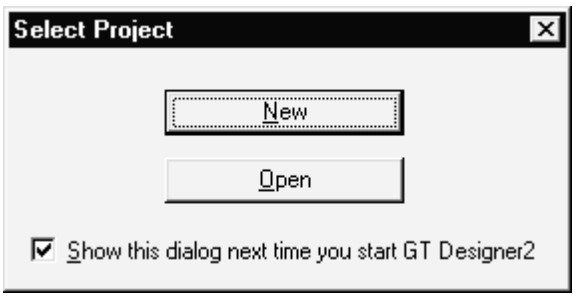
4. CREATING AND EDITING SCREEN

4.1 Selecting Project at the Start of GT Designer2

At the start of GT Designer2, the project selection dialog box is displayed.
Select whether a project is newly created or existing project data is edited.

1. From the PC start menu, select [Start] → [Program] → [MELSOFT Application] → [GT Designer2] to start the GT Designer2.
2. The project selection dialog box is displayed.



Item		Description	A	F
Select project	New	Click this to create a new project.	○	○
	Open	Click this to edit an existing project data.	○	○
	Show this dialog next time you start GT Designer2	When you do not want to display this dialog box at the next start of the GT Designer2, uncheck this.	○	○

3. The operation proceeds to the following depending on the items selected.

New : Set [System environment] of a new project.

☞ Section 4.3 Creating a new project

Open : Specifying a project save source for editing

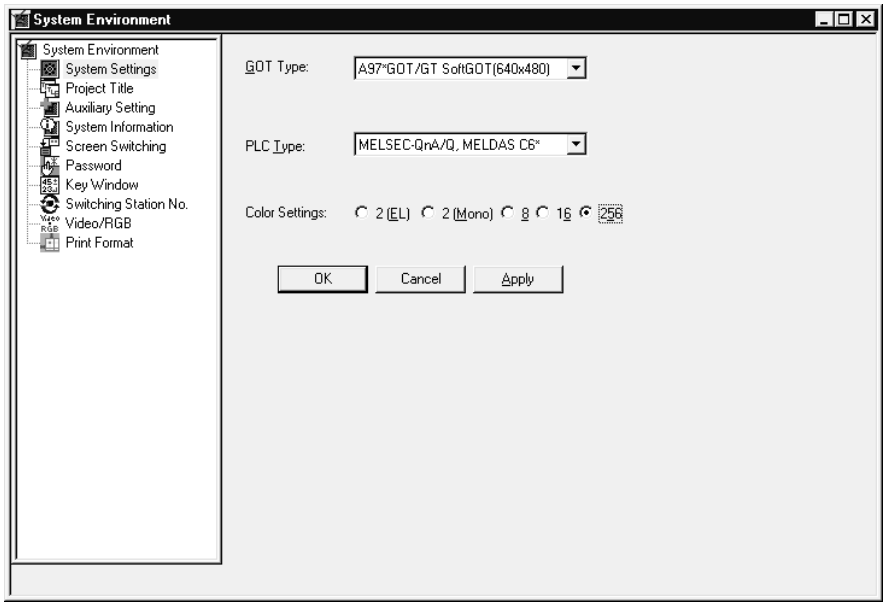
☞ Section 4.4 Opening a project

4 - 1

4.2 Creating a New Project

A new project is created.

1. Perform either of the following operations.
   - Click [New].
   - Select [Project] → [New] menu.
2. The system environment dialog box appears. Perform the system settings.
   For items other than [System settings], refer to the manual below:
   GT Designer2 Version1 Reference Manual



Item		Description	A	F
System settings	GOT type	The GOT type to be used is set.	○	○
	PLC type	The PLC type to be connected is set. Refer to the manual below for details of the PC type. GT Designer2 Version1 Reference Manual	○	○
	Color settings	Screen color displayed on the GOT is set. Select the color according to the GOT display color.	○	○

Point Change of GOT type

Refer to the manual below for cautions when changing GOT type.
GT Designer2 Version1 Reference Manual

3. After system settings, click the [OK] button to go to operation of New Screen.
   Section 4.5 Creating a new screen

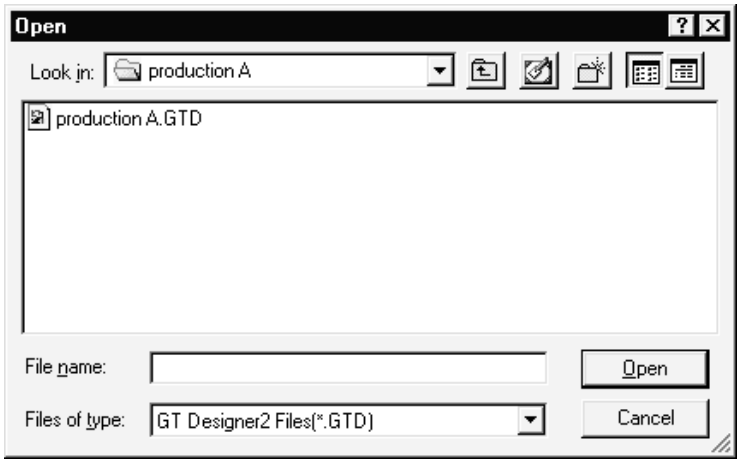
4 - 2

4.3 Opening/Closing Project

4.3.1 Opening project

A saved project data is read from the project save source.

1. Perform either of the following operations.
   - Click (Open).
   - Select [Project] → [Open] menu.
2. The open dialog box is displayed.



Item	Description	A	F
Look in	Select the location where the project is saved.	○	○
File name	Set the project name for opening.	○	○
Files of type	Select the type of project for opening. GTD file (∗.GTD) : Project data of GT Designer2 is opened. DU-Win file (∗.DUP): Project data of DU-Win is opened. GOT file (∗.GOT) : Project data of GT Designer is opened.	○	○

Remark

(1) Using existing GOT data

- GOT800 series : The data are converted to the monitor screen data for the GOT-A900 series with the GT converter.
- A77GOT and 64GOT : The data are converted to the monitor data for the GOT-A800 series and then converted to the monitor screen data for the GOT-A900 series with the GT converter.

Refer to the following for conversion to the monitor screen data for the GOT-A900 series.

☞ GT Converter Help function

(2) Using existing DU (data access unit) data

- DU series: Select the DU-WIN file and open the project data.
  The DU-WIN file is the project data prepared with the FX-PCS-DU/WIN drawing software.

Up to Ver. 1.01B, a temporary file is created in the some folder of DU-WIN file in reading.

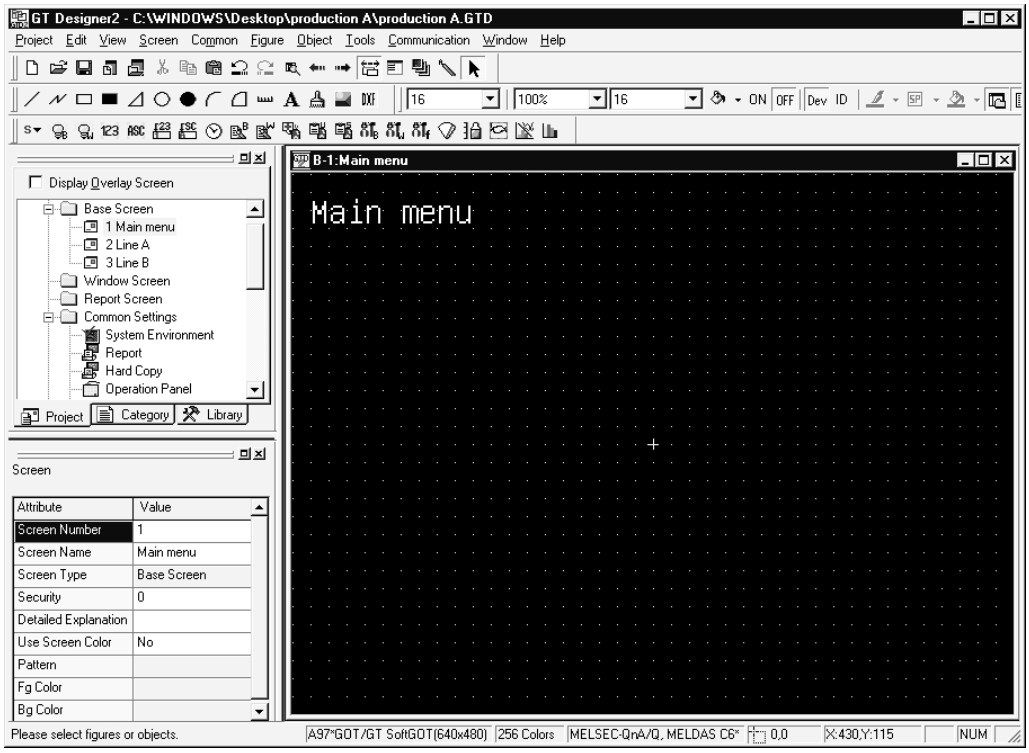
Accordingly, a write-enabled memory device (such as folppy disk and hard disk) should be set to the write-enabled status.

The read screen data is compatible because the menu name and data handling of the software DU-WIN are same.

- The base screen No. starts from No.0.
- The system information consists of control devices.

For the details, refer to the GOT-F900 SERIES OPERATION MANUAL (GT Designer2 Version1).

3 Click the Open button to open the specified project.



Remark Opening project directly

Double click the project data (∗.GTD). The GT Designer2 starts with the project data open.

4.3.2 Closing project

Close the open project.

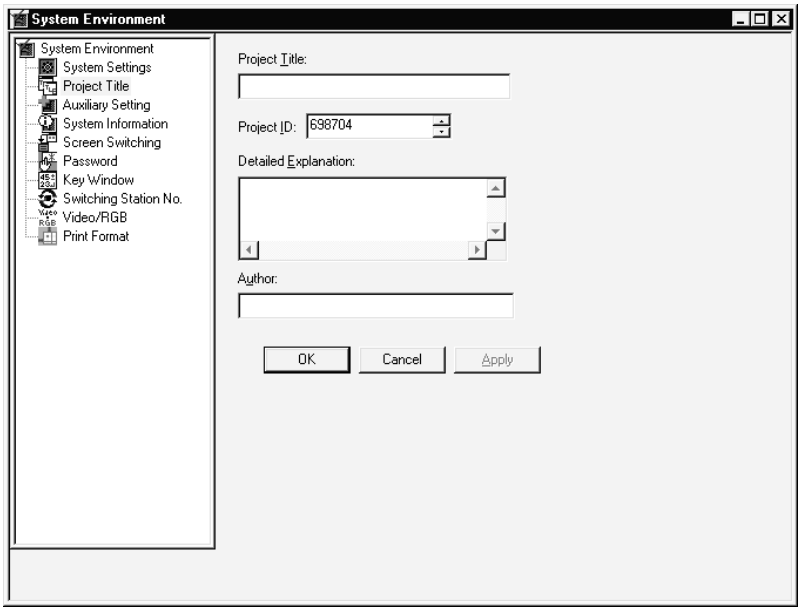
1 Select [Project] → [Close] menu.

2 The open project data is closed.

4.4 Providing Title on Project

Detailed information (project ID, detailed explanation, author, etc.) for the project is set.

1. Select [Common settings] → [System environment] from the menu.
2. Double click [Project title] of the system environment.
3. The project title dialog box appears.
   Set the following items and click the OK button.



Item	Description	A	F
Project title	Project title is set as required. Set the text within 32 characters.	○	○
Project ID ＊1	Set the ID in the range of 1 to 4294967295.	○	○
Detailed Explanation	Project is explained as required. Set the text within 512 characters. (If a line feed is used, it is considered as 2 characters.)	○	○
Author	Author name is set as required. Set the text within 8 characters.	○	○

Refer to the following for details of ＊1.

＊1 Project ID

The project ID number is registered to prevent the downloaded project data from being mixed with other project data.
When a part of the other project data screen is downloaded, the project ID number is checked to call your attention.
(If the project ID number is different, the data can be downloaded.)

4.5 Creating a New Screen

Base screen, window screen and report screen are newly created.
Refer to the manual below for the preparation method of the report screen.

☞ GT Designer2 Version1 Reference Manual

1 Perform either of the following operations.

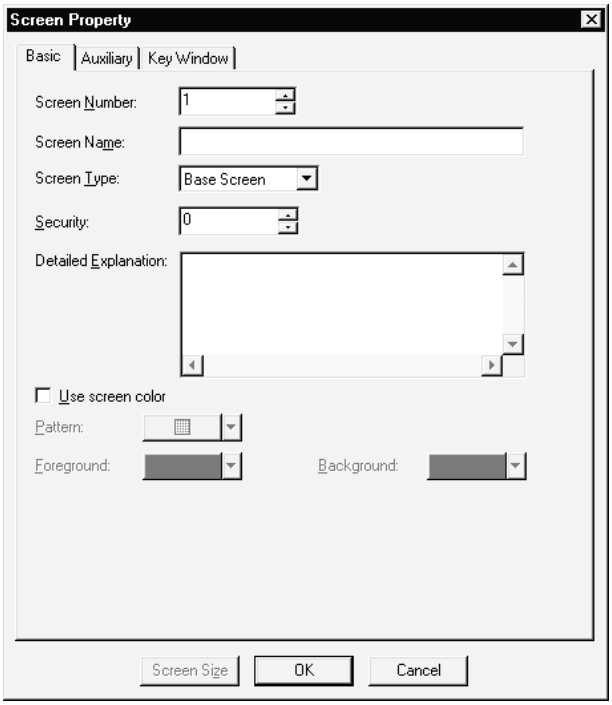
- Click (New Screen).
- Select [Screen] → [New Screen] → [Base Screen]/[Window Screen] menu.

2 The screen property dialog box is displayed.

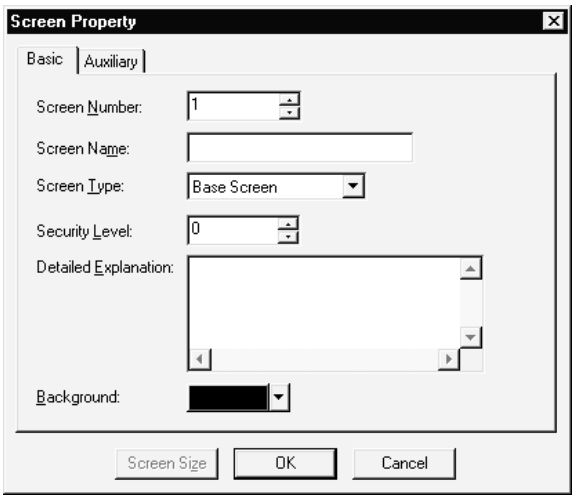
After setting the items below, click the OK button. The screen is created.

■ Basic tab

Screen number, name and type of the new screen are set.

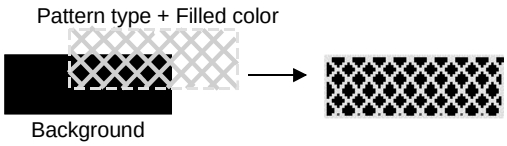


(GOT-A900 series)



(GOT-F900 series)

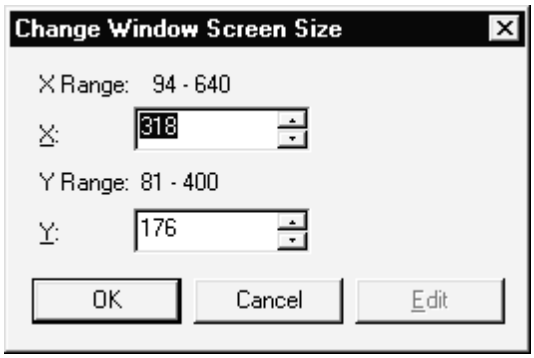
Item	Description	A	F
Screen Number	Screen number is selected.	○	○
Screen Name	Screen name is input. Set the text within 32 characters. (If a line feed is used, it is considered as 2 characters.)	○	○
Screen Type	Screen type is selected. Base screen : Base screen is created. Window screen: Window screen is created.	○	○
Security	Security level (1 to 15) of each screen is set. When the security function is not used, set to "0." Refer to the manual below for details of the security function. ☞ GT Designer2 Version1 Reference Manual	○	○

Item		Description	A	F
Detailed Explanation		Explanation of the new screen to be created is input as required. 512 characters can be input.	○	○
Use screen color		Color of the overall screen is set. Pattern type is displayed with filled color on the background.	○	×
	Pattern	(Ex.) Background: ■ Pattern : ▩ Foreground : □  	○	×
	Foreground		○	×
	Background		○	×
Background		Color of the overall screen is set.	×	○
Screen Size ＊1		Size is displayed only for creation of the window screen. Size of the window screen is set.	○	×

Refer to the following for details of ＊1.

＊1 Screen size

Set the following items to determine the window screen size.



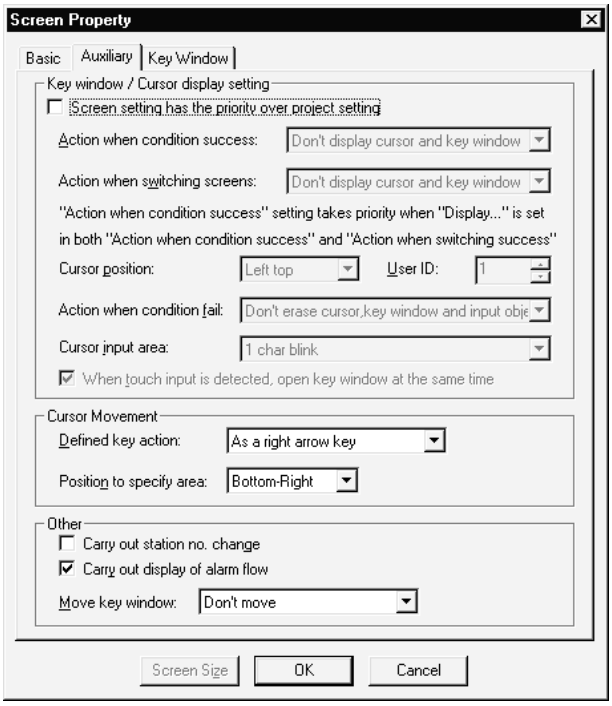
Item	Description	A	F
X	Horizontal window screen size is set.	○	○
Y	Vertical window screen size is set.	○	○
Edit	A handle for size change is displayed on the screen. Move the cursor to the handle position and drag it to change the size. When the screen becomes the desired size, click it to determine the window screen size. This cannot be set when the screen is newly created. (This can be selected for editing after creation of the screen.)	○	○

4 - 7

■ Auxiliary setting tab

Settings of the cursor, key window or data input for the screen which is newly created, and use/non-use of some object functions are specified.
Settings here can be changed after creation of the screen.
Refer to the manual below for details of the settings.

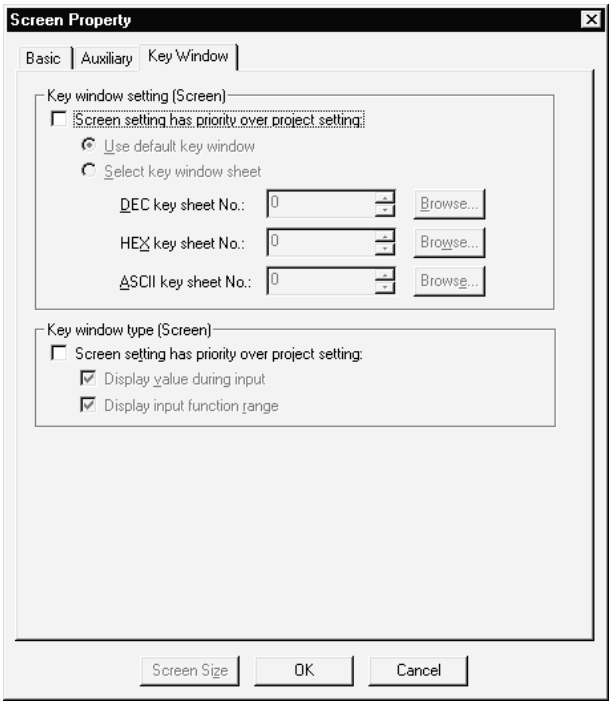
☞ GT Designer2 Version1 Reference Manual


Screen Property
Basic
Auxiliary
Key Window
Key window / Cursor display setting
Screen setting has the priority over project setting
Action when condition success:
Don't display cursor and key window
Action when switching screens:
Don't display cursor and key window
"Action when condition success" setting takes priority when "Display..." is set in both "Action when condition success" and "Action when switching success"
Cursor position:
Left top
User ID:
1
Action when condition fail:
Don't erase cursor,key window and input obje
Cursor input area:
1 char blink
When touch input is detected, open key window at the same time
Cursor Movement
Defined key action:
As a right arrow key
Position to specify area:
Bottom-Right
Other
Carry out station no. change
Carry out display of alarm flow
Move key window:
Don't move
Screen Size
OK
Cancel

■ Key window tab

The key window which is used on the new screen is set.
Settings here can be changed after creation of the screen.
Refer to the manual below for details of the settings.

☞ GT Designer2 Version1 Reference Manual



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4.6 Opening/Closing Screen

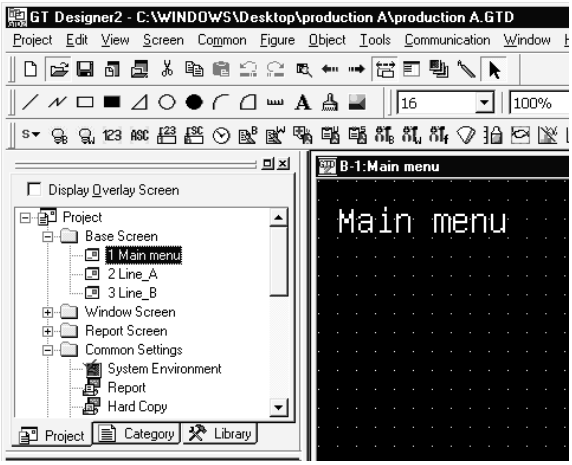
4.6.1 Opening screen

Point Number of screens that can be opened at a time

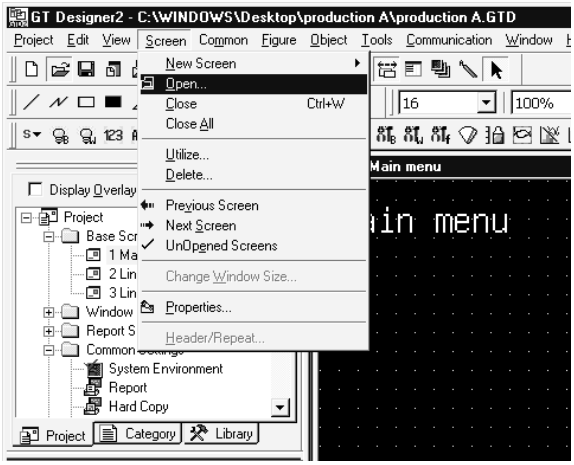
Maximum 25 screens can be opened.

Screen data are imported on the currently editing project.
The procedures are as follows:

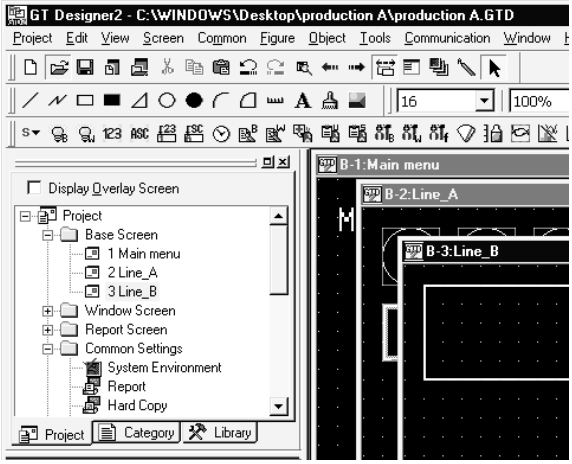
(1) Open the screen from the workspace.
(Operation details are described on the following pages.)



(2) Open the screen from the menu.
(Operation details are described in Hint on the following pages.)



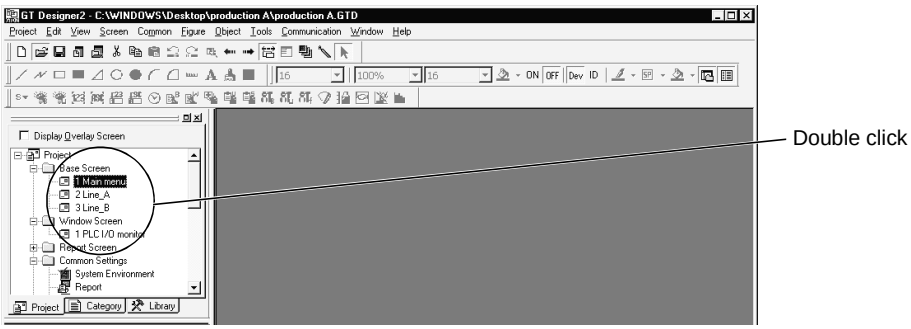
(3) Open the screen continuously.
(Operation details are described in Hint on the following pages.)



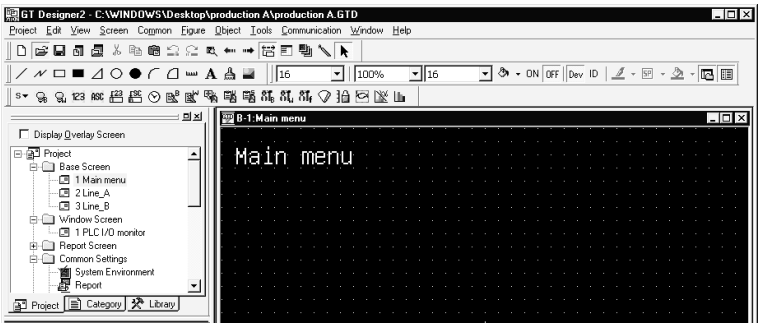
4 - 9

In this section, the method of opening the screen from the workspace in (1) is described.

1 Double click the desired screen for opening in the project workspace.



2 The screen opens.



Hint!

Method of opening other than workspace

(1) Opening screen from menu

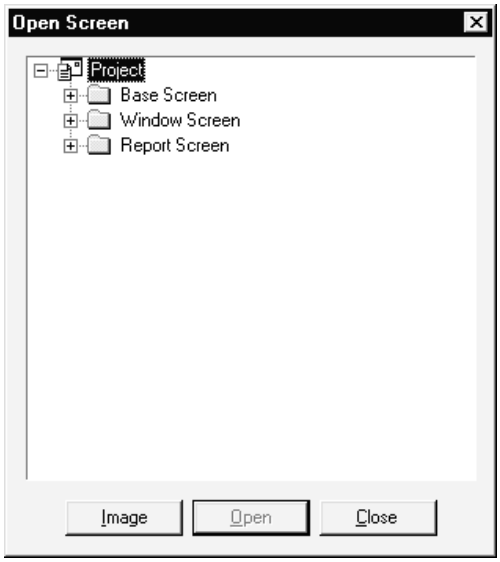
1 Perform either of the following operations.

- Click (Open) of toolbars (Standard).
- Select [Screen] → [Open] from the menu.

2 The dialog box to open the screen is displayed.

Click the Image button.

(Double click the desired screen directly for opening.)



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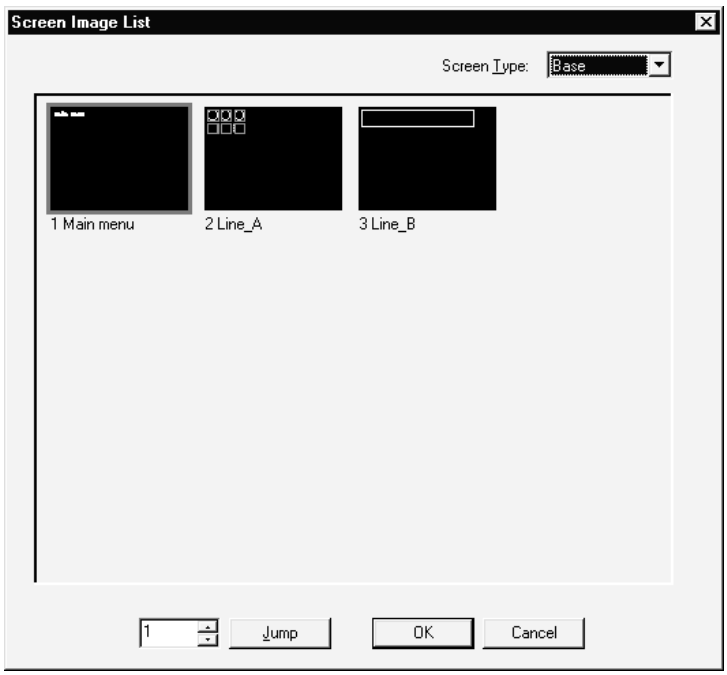
3 The screen image view dialog box is displayed.

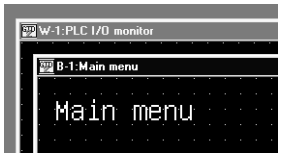
Double click the desired screen.



Item	Description	A	F
Screen Type	Screen type for opening is selected. Base screen : Base screen is displayed. Window screen: Window screen is displayed. Report screen : Report screen is displayed.	○	○
Screen display list	Screen image is displayed in a list. Double click each screen to open the screen.	○	○
Jump	The screen number is selected to open the screen.	○	○

(2) Opening screen continuously

1 Select the drawing screen of the desired type (base screen/window screen) for continuous opening and make the screen active.



2 Click of the toolbars and keep the button depressed ( ).

3 Click the button to open the same type screen of the active screen.

4 - 11

4.6.2 Closing screen

The open screen is closed.

1. Perform either of the following operations.
   - Select [Screen] → [Close] from the menu.
   - Click ☒ on the title bar of each screen.
2. The open screen is closed.

Closing all screens.

Select [Screen] → [Close All] from the menu to close all open screens.

4 - 12

4.7 Operating Multiple Screens

4.7.1 Cascading/tiling screens

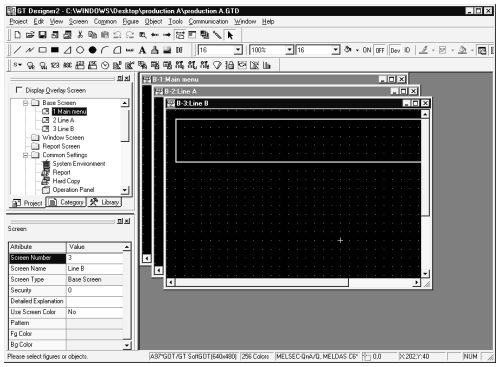
Multiple screens in the project are reordered.

1. Select [Window] → [Cascade]/[Tile Vertical]/[Tile Horizontal].
2. Multiple open screens are reordered as follows:

(Ex.)

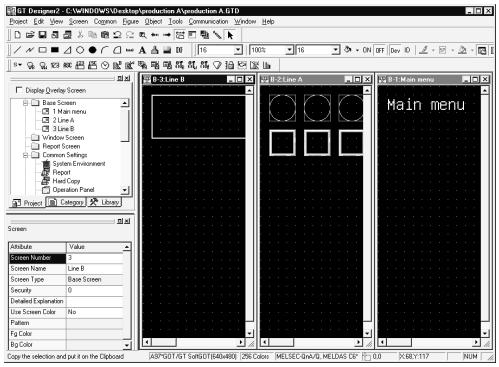
- Cascade

  Overlapped screens are displayed toward the lower right like a staircase.



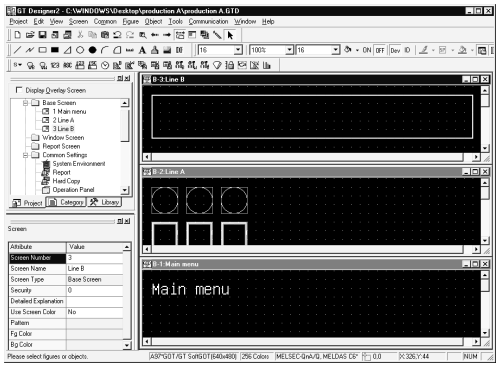
- Tile vertical

  Screens are displayed as follows without overlapping.



- Tile horizontal

  Screens are displayed as follows without overlapping.



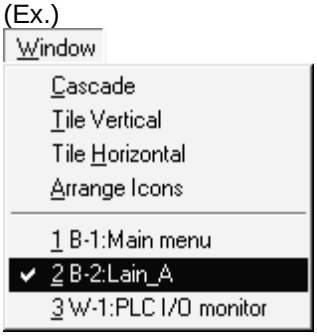
4 - 13

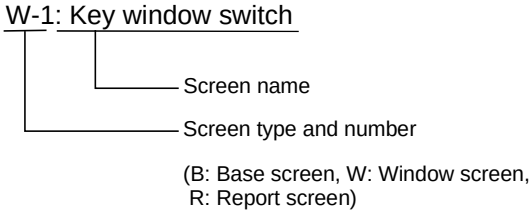
4.7.2 Making editing screen active

To edit a screen while multiple screens are displayed, make the edit screen active with either of the methods below:

1 Select the screen name from the [Window] menu.

(Ex.)

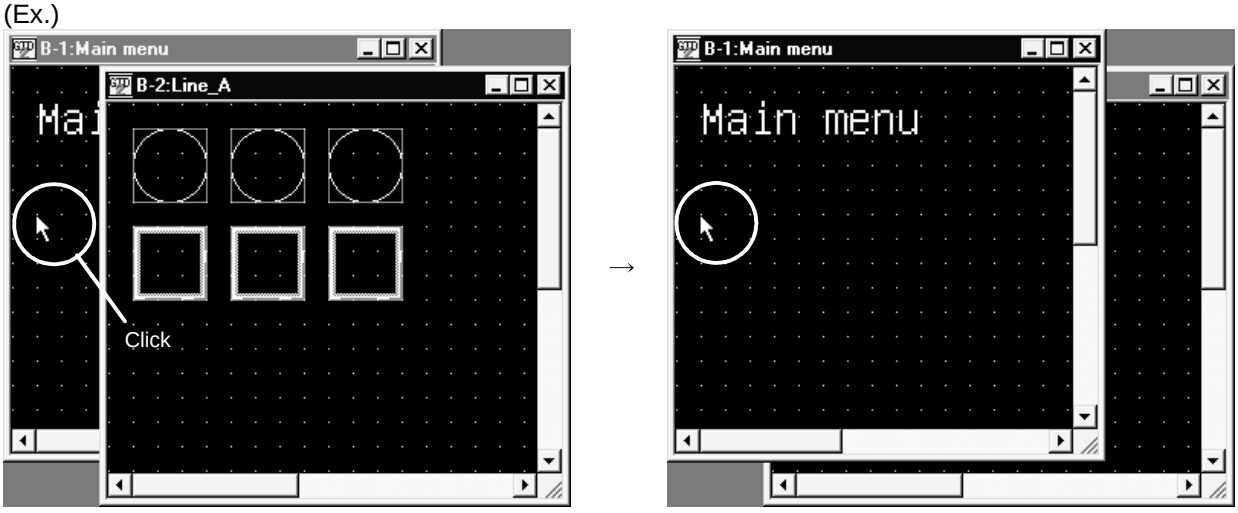




2 Click on a part of the screen.

Click on a part of the screen to make it active.

(Ex.)



Click on a part of the left window. The left window is displayed at the front.

Remark Activating method with ◀ ▶ of toolbar

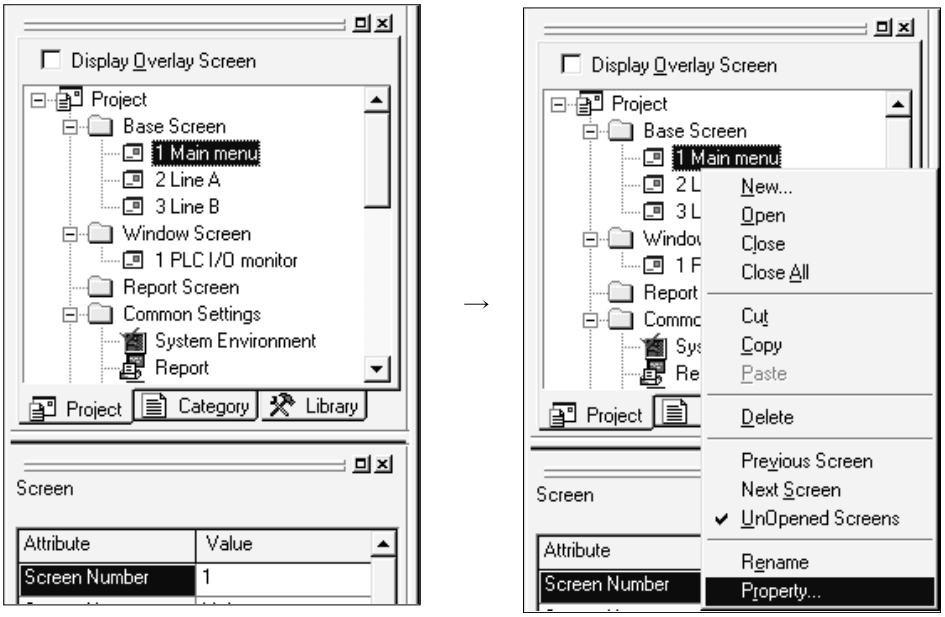
Click ◀ ▶ of the toolbar to switch the active screen within a range of the same screen type (base/window screen/report screen).

4 - 14

4.8 Changing Screen Property

Screen settings such as screen number or home are changed.

1. Select the desired screen to change the property in the project workspace and select [Property] by right clicking on the mouse.



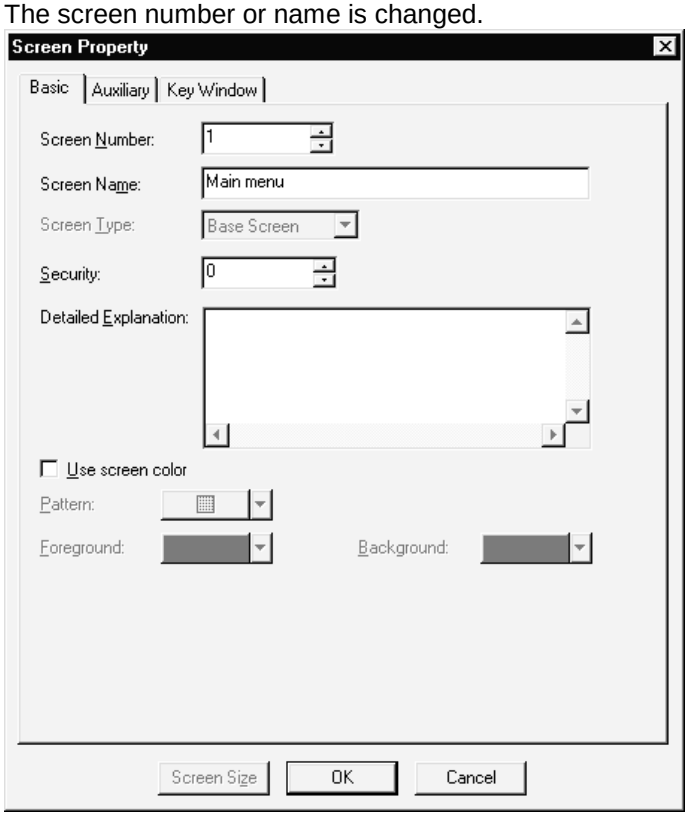
2. The screen property dialog box appears.

Refer to the following for details of settings.

☞ Section 4.5 Creating a new screen

■ Basic tab

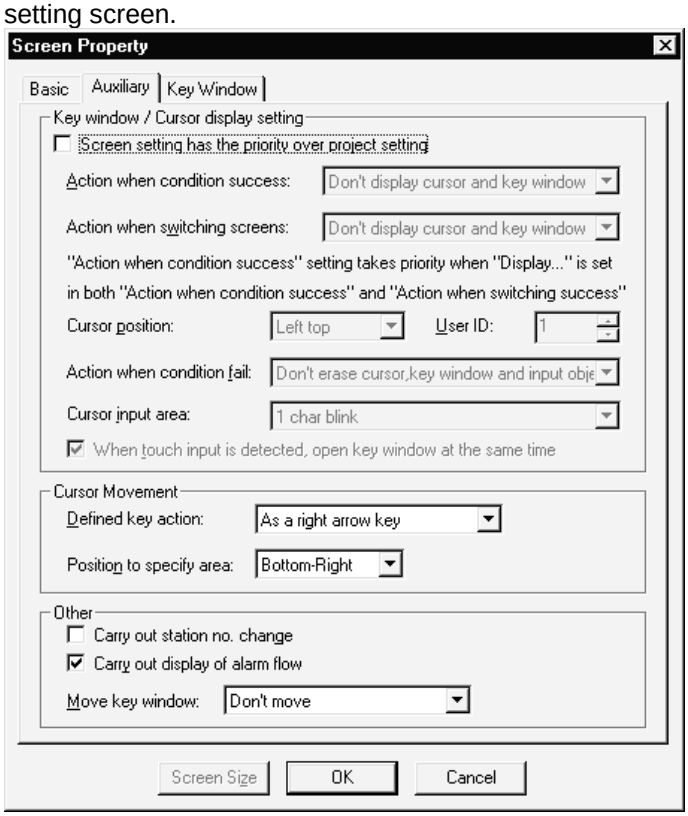
The screen number or name is changed.



4 - 15

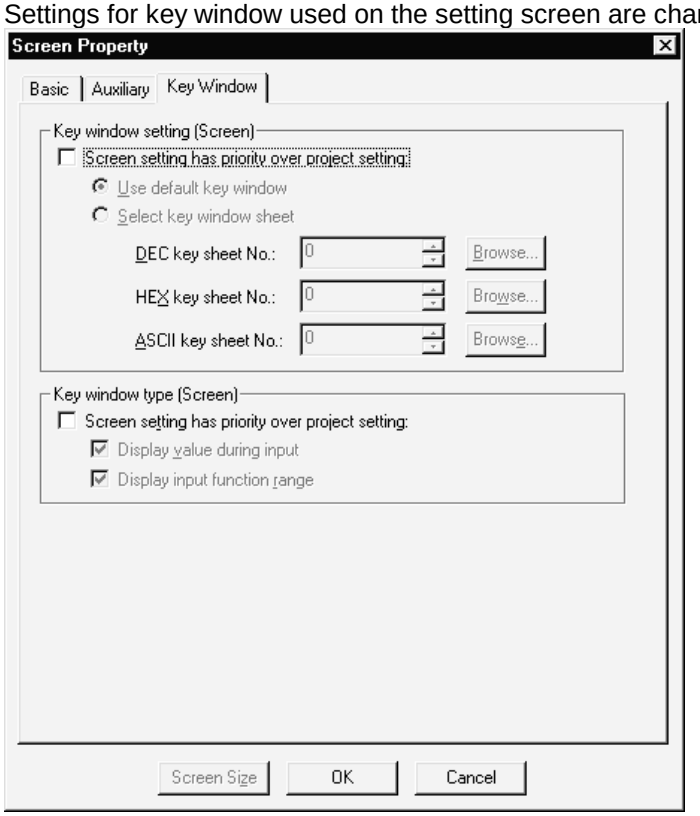
■ Auxiliary setting tab

Settings for data input operation and use/non-use of the object function are changed on the setting screen.


Screen Property
Basic
Auxiliary
Key Window
Key window / Cursor display setting
Screen setting has the priority over project setting
Action when condition success:
Don't display cursor and key window
Action when switching screens:
Don't display cursor and key window
"Action when condition success" setting takes priority when "Display..." is set in both "Action when condition success" and "Action when switching success"
Cursor position:
Left top
User ID:
1
Action when condition fail:
Don't erase cursor,key window and input obje
Cursor input area:
1 char blink
When touch input is detected, open key window at the same time
Cursor Movement
Defined key action:
As a right arrow key
Position to specify area:
Bottom-Right
Other
Carry out station no. change
Carry out display of alarm flow
Move key window:
Don't move
Screen Size
OK
Cancel

■ Key window tab

Settings for key window used on the setting screen are changed.



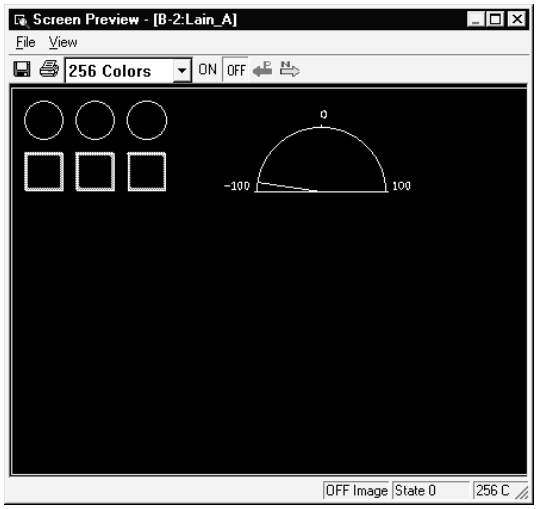
3 After changing settings of each tab, click the OK button.

4 - 16

4.9 Viewing Created Screen Image

Image displayed on the GOT is checked.

1. Perform either of the following operations.
   - Click .
   - Select [View] → [Preview] menu.
2. The image displayed on the GOT is displayed on the preview screen.
   The preview display can be changed/output from each menu.



Item		Description	A	F
File	Save	Preview display is saved in a file (BMP format file).	○	○
	Print	Preview display is printed.	○	○
	Printer Settings	Printer settings, paper and paper orientation are set.	○	○
	Output in reverse	Black and white is reversed when printing based on the printer/file setting.	○	○
	Fill Black at Text BG	Letters are filled in white and letter background is filled in black to make clearly visible reversed when printing based on the printer/file setting.	○	○
	Dithering	Intermediate color tone is provided on the two tone monochrome screen when printing based on the printer/file setting.	○	○
	Close	Preview screen is closed.	○	○
View	Menu and Title	Display/non-display of the title bar is selected.	○	○
	Toolbar	Display/non-display of the toolbars is selected.	○	○
	Status Bar	Display/non-display of the status bar is selected.	○	○

Item		Description	A	F
Display	ON Image	Every time the menu is selected, the preview screen display is switched to ON/OFF status. The display is the same as the ON/OFF display on the drawing screen.	○	○
	Next State	Screen display status set with the "State" in the object is switched in the ascending order.	○	×
	Previous State	Screen display status set with the "State" in the object is switched in the descending order.	○	×
	2 Colors (EL)	Screen colors to be displayed are set. Select the colors available for the GOT to be used.	○	×
	2 Colors (Blue Back)		×	○
	2 Colors (Monochrome)		○	○
	8 Colors		○	○
	16 Colors		○	×
	256 Colors		○	○

Remark

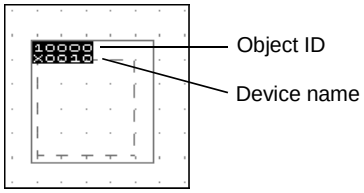
(1) Items displayed on preview

Items displayed on the preview (display/non-display of object, object ID, device name, etc.) can be changed with the settings of the GT Designer2.

Section 3.4.3 Customizing GT Designer2 operating environment

(2) Display of object ID and device name

Object ID and device name are displayed on the preview screen. It is not displayed on the GOT.



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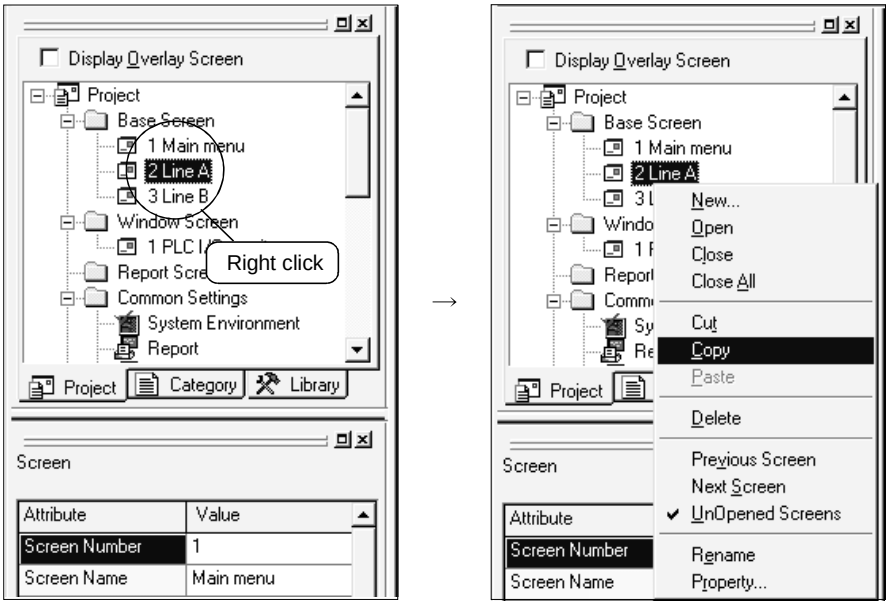
4.10 Copying/Deleting Screen

4.10.1 Copying screen data

1. Select the desired screen for copying in the project workspace and right click the mouse to select the [Copy] menu. Up to 25 screens can be copied at a time.

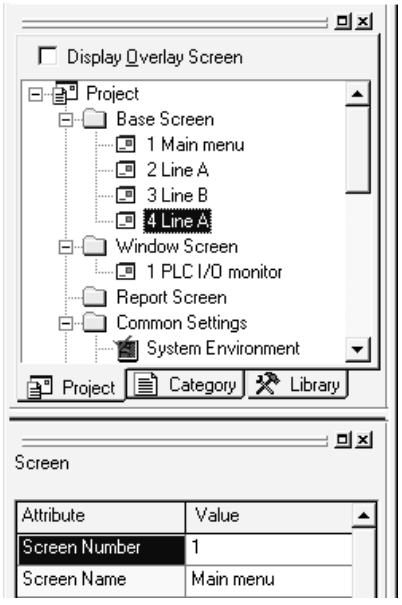


2. Right click the mouse again and select the [Paste].

3. The screen property dialog box appears. Set the screen number of the copying screen.

   ☞ Section 4.5 Creating a new screen

4. After setting, click the [OK] button to display the copied screen.



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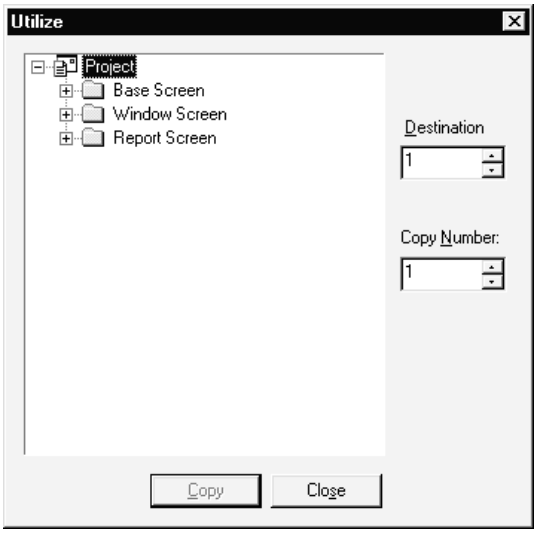
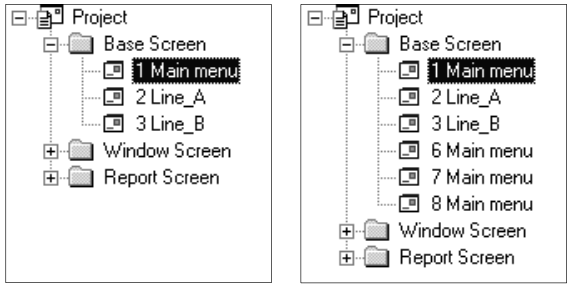
Remark To copy screens continuously

One screen can be copied to multiple screens.

1. Select [Screen] → [Utilize].
2. The utilize dialog box appears.
   Set the following items and click the Copy button.



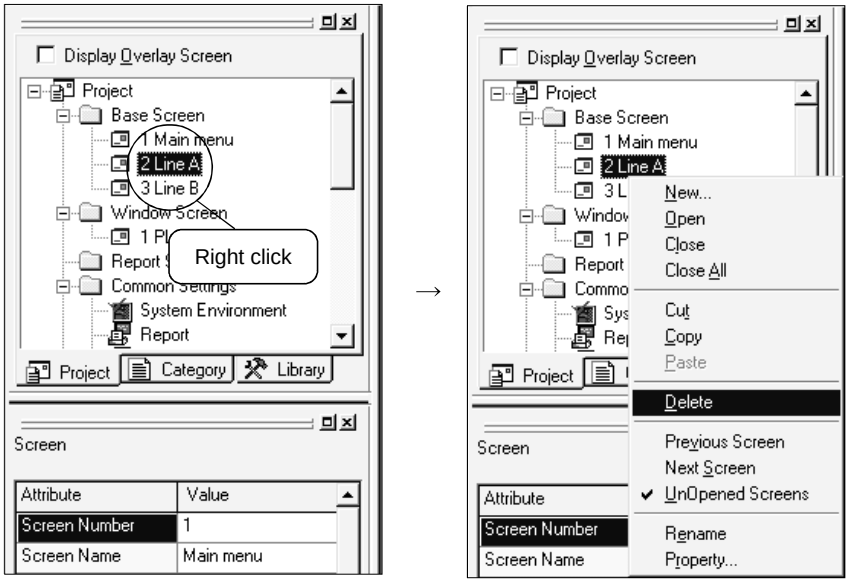
Item	Description	A	F
Project display list	The screen to be copied is selected (up to 25 screens).	○	○
Destination	Set the copy destination screen number (1 to 32767).	○	○
Copy Number	The number of copies is set. Up to 100 screens can be copied at a time. Ex.: Copying with destination number "6" and number of copy "3" The screen is copied to base screens 6, 7 and 8.  Before copy After copy	○	○

3. The screen is copied.
4. Property (name, attribute, etc.) of the copied screen is checked or edited.

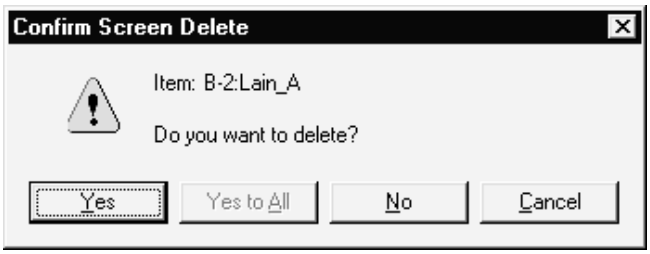
☞ Section 4.5 Creating a new screen

4.10.2 Deleting screen data

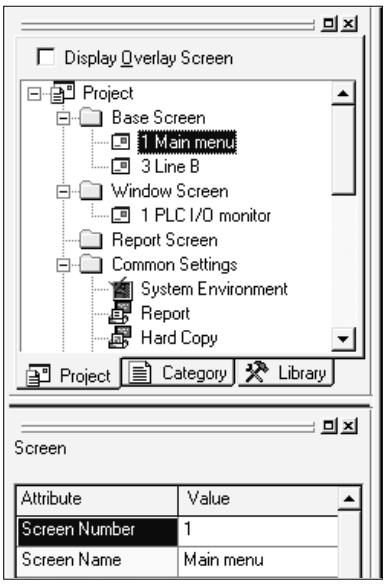
1. Select the desired screen for deletion in the workspace (project tab) and right click the mouse to select the [Delete] menu.



2. The confirmation screen for deletion of the screen appears. Click the Yes button.



3. The selected screen is deleted.



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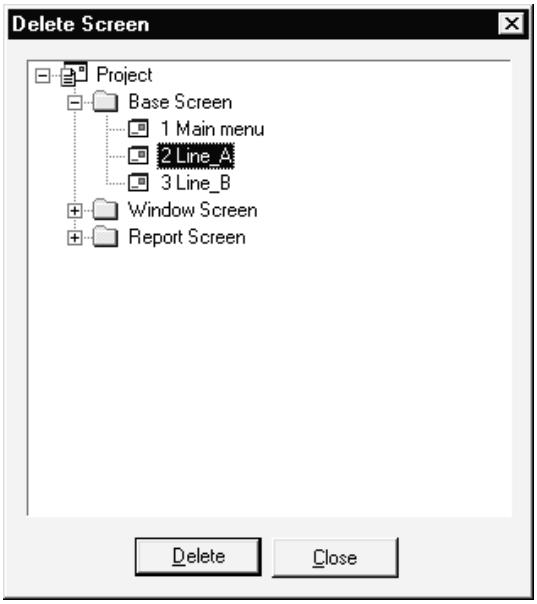
Remark Deleting screen data from menu bar

1. Select [Screen] → [Delete] menu.
2. The screen deletion dialog box appears.
   Select the screen to be deleted and click the Delete button.



3. The selected screen is deleted.

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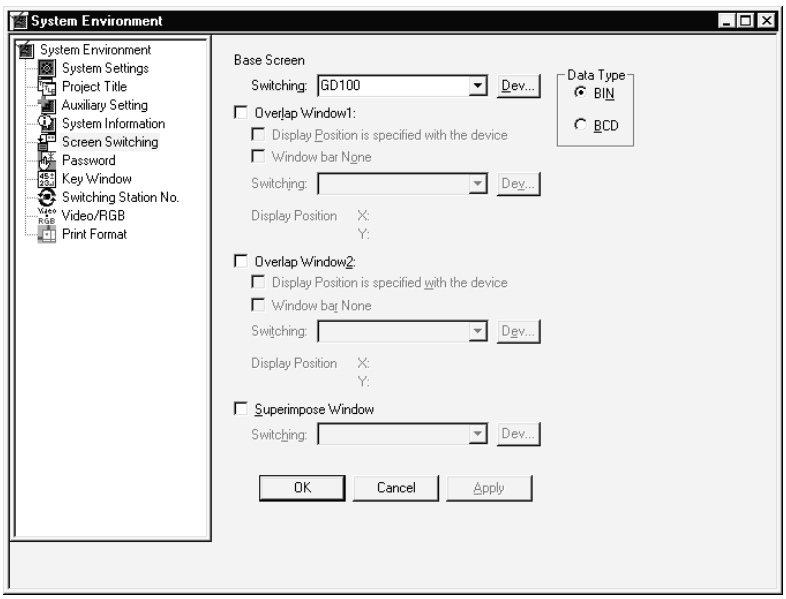
4.11 Setting Screen Switching Device

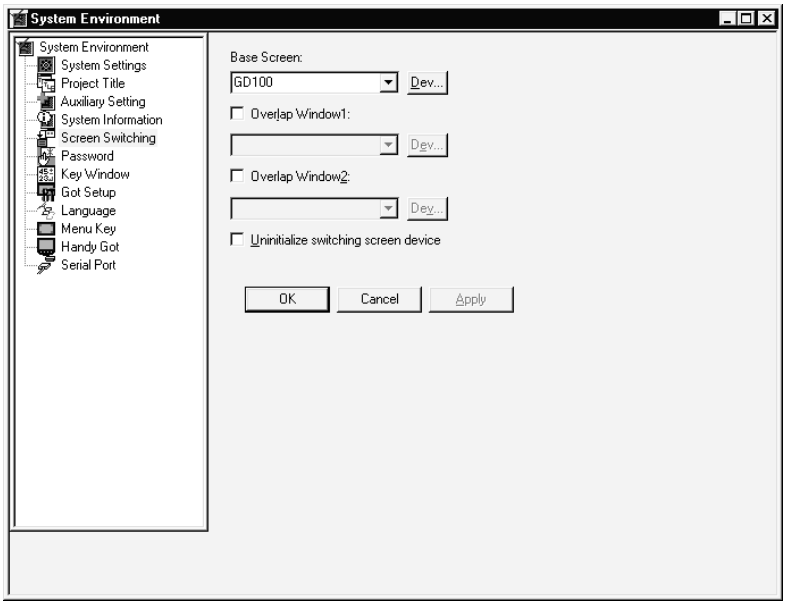
To switch the screen on the GOT or to display the window screen, use the dedicated device for screen switching.
Refer to the manual below for details of the screen switching device.

☞ GT Designer2 Version1 Reference Manual

1. Select [Common] → [System Environment] menu of the menu bar.
2. Double click [Screen Switching] of the system environment.
3. The screen switching setting dialog box appears.
   After setting, click the [OK] button.



(Setting of GOT-A900 series)



(Setting of GOT-F900 series)

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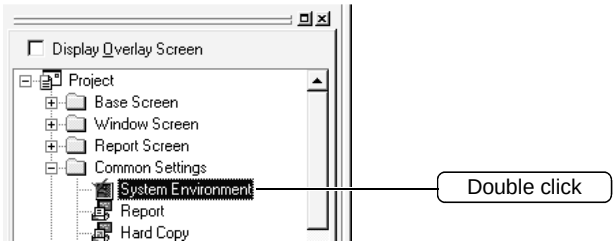
Item		Description	A	F
Base Screen		The base screen switching device is set. Refer to the manual below for the device setting method. ☞ GT Designer2 Version1 Reference Manual	○	○
Overlap Window 1 Overlap Window 2		This is checked to display overlap window 1 and overlap window 2. After checking, the screen switching device of each window is set. (When the screen switching device is not set, the window for that type is not displayed.)	○	○
	Display Position is specified with the device	This is checked to specify the window display position with the device value.	○	×
	Window bar None	This is checked not to display the movement key and the close key.	○	×
Superimpose Window		This is checked to display the superimpose window. After checking, the screen switching device of the super impose window is set. (When the screen switching device is not set, the superimpose window is not displayed.)	○	×
Uninitialize switching screen device		When "1" is to be input to the device set in Base screen at power ON, this is unchecked. The device value is reset when the PLC is powered ON and it prevents the screen data error from being displayed on the GOT screen.	×	○

Remark

(1) Setting in project workspace

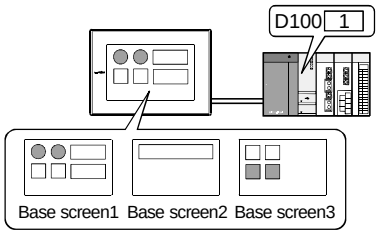
Double click the system environment. The system environment setting dialog box appears. Double click [Screen Switching].



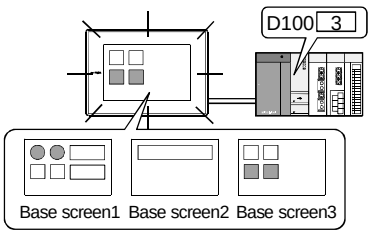
(2) What is the screen switching device?

To switch a screen on the GOT or to display the window screen, use the screen switching device.
The GOT displays the screen for the value stored in the screen switching device.
Use the device set for the screen switching only for screen switching on the GOT.

When the screen switching device value is "1," the GOT displays base screen 1.



When the screen switching device value is "1 --> 3," the GOT displays base screen 3.



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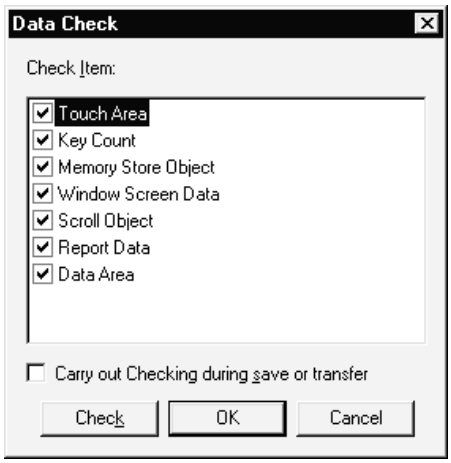
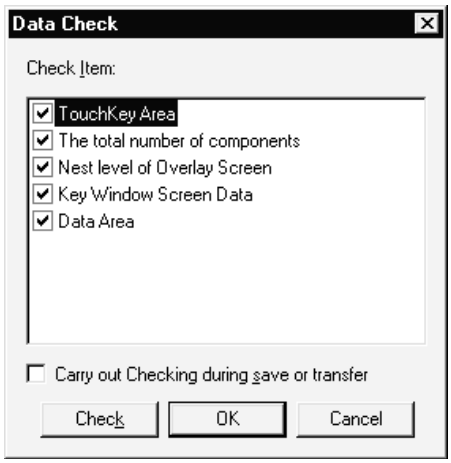
4.12 Data Check

Whether the monitor screen data created with the GT Designer2 has an error or not is checked.

1. Open all screens for data check. Unopened screens are not data checked.
2. Select [Tools] → [Data Check] menu.
3. The data check dialog box is displayed.
   Set the check items for data check and click the Check button.



(Setting of GOT-A900 series)



(Setting of GOT-F900 series)

Item		Description	A	F
Check Item		Items for data check are checked.	○	○
	Touch Area	Whether overlap of touch switch functions occurs is checked. • Touch switches are overlapped. • Numerical input/ASCII input is overlapped with touch switches.	○	○
	Key Count	Whether the number of touch switch functions exceeds 256 on one screen is checked.	○	○
	Memory Store Object	Whether the number of objects (alarm list, trend graph and scatter graph) which set the memory storage is 17 or more for each object is checked.	○	×
	Window Screen Data	Whether the data list or the alarm history is set on the window screen is checked. (The data list and the alarm history cannot be displayed on the window screen.)	○	×
	Scroll Object	Whether multiple objects with scroll display (data list, alarm history and alarm list) are set on one screen is checked.	○	×
	Report Data	When the report screen is created, whether the numerical print or the comment print is set on the header is checked.	○	×
	Number of object entries	Whether the number of objects that can be registered on one screen exceeds the limit is checked.	×	○
	Nest level of set overlay screens	Whether the nest level of set overlay screens is within 5 that can be set on one screen is checked.	×	○
	Key window screen data	Whether there is any object that cannot be set on the window screen is checked.	×	○
	Data Area	Whether any object is set outside the screen range is checked.	○	○
Carry out Checking during save or transfer		Data check is automatically performed when a project is saved or a monitor screen data is transferred to the GOT.	○	○

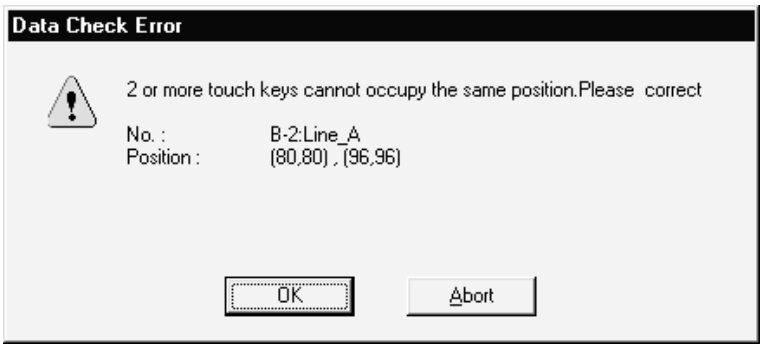
Remark Applicable item for data check

Data check are applicable only for open screens.
Closed screens are not checked.

3 When the data check is performed with the settings, click the Check button.
(To close the dialog box after updating the settings, click the OK button.)

4 If an error is detected after checking, the following screen is displayed.

(Ex.)


Data Check Error
2 or more touch keys cannot occupy the same position.Please correct
No. : B-2:Line_A
Position : (80,80) , (96,96)
OK
Abort

When OK is clicked, data check is continued for any other error.
When Abort is clicked, data check is cancelled.

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4.13 Saving Project

4.13.1 Overwriting and saving project

When an existing data has been edited, the project is overwritten and saved.

1. Perform either of the following operations.
   - Click (Overwrite).
   - Select [Project] → [Save] menu.

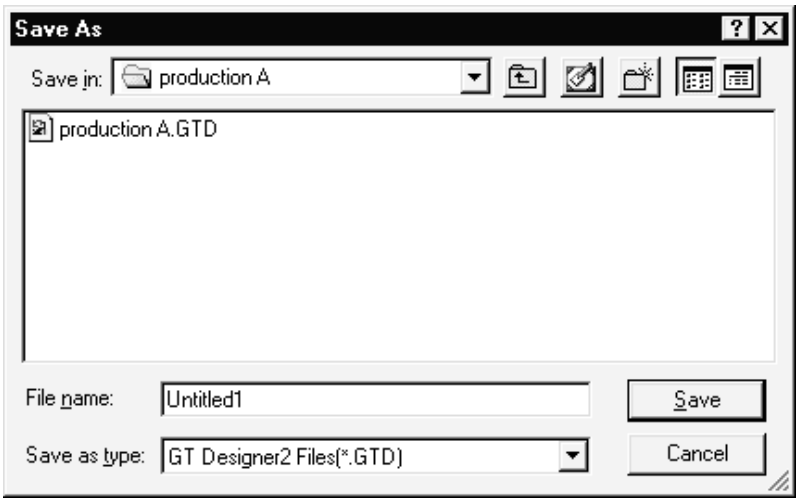
Point When using FD (floppy disk).

When a project is overwritten and saved, the same size of free disk space as the project data size is required. If an FD is used, overwriting and saving may not be carried out due to insufficient disk space.
If overwriting and saving is not allowed, save the project in the PC hard disk. Then, copy it to the FD.

4.13.2 Saving as project name

When a newly created project is saved or an existing project is saved with a different project name, set as follows:

1. Select [Project] → [Save as].
2. The save as dialog box appears.
   Set the following items and click the Save button.



Item	Description	A	F
Save in	The location to save the project is selected.	○	○
File name	The project name to be saved is set.	○	○
Save as type	GT Designer2 Files (∗.GTD) It is saved as the GT Designer2 format project data. Intel Hex Files (∗.ITH) (only for GOT-F900 series) It is the data transfer data file between the ROM writer and the PC and is saved as the Intel Hex code. Data cannot be saved in other formats (GT Designer, DU-WIN).	○	○

Point When an existing project is saved as a different project

The library data (GTD2.ldb) with registration of user-created objects and figures are not saved as a different project file.
The project saved as a different project refers to the same library data (GTD2.ldb) as the existing project.
If you want to separate a library from the existing project data, save the existing project library as a different file.

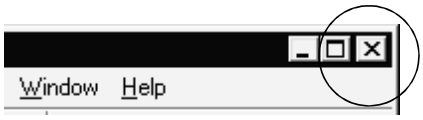
☞ Item 7.3.6 Saving library into file

4.14 Ending GT Designer2

1. Select [Project] → [Exit].
2. The GT Designer2 is ended.

Remark Ending GT Designer2 from title bar

Click ✕ on the title bar to end the GT Designer2.



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5. DATA TRANSFER OPERATION

5.1 Type and Size of Transfer Data to GOT

5.1.1 Data type to be installed on GOT

To operate the GOT, it is necessary to transfer the following data to the GOT.
(In the GOT-F900 Series, as the data including the OS has been written prior to shipment, the data transfer is not necessary.)

Item		Transfer destination ∗1 (Area in GOT)	Necessity	Reference	A	F
ROM_BIOS		Dedicated memory	△	1 in this section	○	×
OS	Standard monitor OS	Dedicated memory	○	2 in this section	○	×
	Communication driver	Dedicated memory	○	3 in this section	○	×
	Extended function OS	Built-in memory	△	4 in this section	○	×
Monitor data (Provided by user)		Built-in memory	○	5 in this section	○	○
Special data (special module/motion/ servo amplifier monitor data)		Built-in memory	△	6 in this section	○	×

○ : Data must be transferred.
△ : Data needs to be transferred depending on the function.

∗1 Transfer destination

Dedicated memory: Area to store the ROM_BIOS, standard monitor OS and communication driver. Calculation or addition of the memory space is not required.

Built-in memory: Area to store the extended function OS, monitor data and special data. Calculation of the memory space and addition of the memory is required as necessary.

Point

(1) Downloading monitor data

When the version of the ROM_BIOS and the OS (standard monitor OS, communication driver and extended function OS) of the GT Designer2 is later than that of the system program installed on the GOT, the new functions may not be compatible.
It is recommended to reinstall the ROM_BIOS and the OS when downloading the monitor data to the GOT.

(2) Installing OS

Make sure that the version numbers (leftmost version) of the OS (standard monitor OS, communication driver and extended function OS) are the same.
If the version numbers are different, the GOT is not operated.

(Ex. 1)
Standard monitor OS : Ver. 9.∗.∗
Communication driver : Ver. 9.∗.∗
Extended function OS : Ver. 9.∗.∗
The GOT is operated.

(Ex. 2)
Standard monitor OS : Ver. 9.∗.∗
Communication driver : Ver. 8.∗.∗
Extended function OS : Ver. 8.∗.∗
The GOT is not operated.

5 - 1

1 ROM_BIOS

It is the data required for control of the GOT hardware and communication between the PC and the GOT.

The ROM_BIOS is installed prior to shipment of the GOT.

To use the following types/functions, the ROM_BIOS of the applicable version needs to be installed to the GOT.

Type/function name	Applicable ROM_BIOS version
Use of flash PC card	Version F or later
MELSEC-Q/QnA ladder monitor function	Version H or later
A9GT-QFNB8M A9GT-FNB8M	Version H or later
A9GT-FNB1M (Hardware version B or later) A9GT-FNB2M (Hardware version B or later) A9GT-FNB4M (Hardware version B or later) A9GT-QFNB (Hardware version B or later)	Version M or later
Use of base screen numbers from 1024 to 4096	Version P or later
Ethernet connection	Version Q or later
Gateway function	Version S or later
CNC monitor function	Version W or later
KANA KANJI function	
Font change function	Version X or later

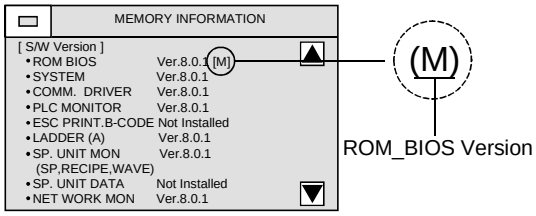
(1) Check method of ROM_BIOS

The ROM_BIOS version installed to the GOT can be checked with the GOT memory information or the rating nameplate.

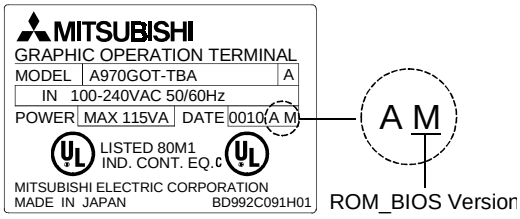
If a user has upgraded the ROM_BIOS, the ROM_BIOS version installed on the GOT is different from the version on the rating nameplate. Check the version from the memory information.

Immediately after purchase of the product, the version may be checked with the rating nameplate.

(a) Memory information



(b) Rating nameplate

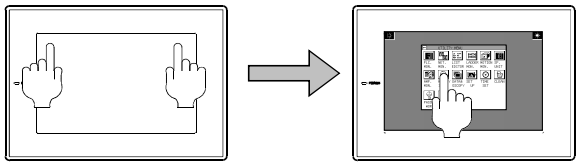


5 - 2

Remark Display method of memory information

Display the GOT memory information on the utility.

<Display example of memory information>



Touch the upper right and the upper left of the screen at the same time.

Select the utility memory information.

Refer to the manual below for the start-up method and the operation method of the utility.

☞ GOT-A900 Series Operating Manual (GT Works2 Version1/GT Designer2 Version1 compatible Extended • Option Functions Manual)

(2) Upgrading method

The ROM_BIOS can be upgraded with the method below:

(a) Upgrading with RS-232C communication

☞ Section 5.2 Transferring data with RS-232C communication

(b) Upgrading with PC card

☞ Section 5.3 Transferring data with PC card

2 Standard monitor OS

It is the program to control the monitor function.

3 Communication driver

It is the driver to make communication between the GOT and the PLC CPU.
Select the communication driver suitable for the connection type.

Connection type		Communication driver name
Bus connection	QCPU (Q mode)	Bus (Q)
	A/QnACPU	Bus (A/QnA)
CPU direct connection	A/QnA/QCPU, MELDAS C6/C64	A/QnA/QCPU, QJ71C24, MELDAS C6*
	FXCPU	MELSEC-FX
Computer link connection	QCPU	A/QnA/QCPU, QJ71C24, MELDAS C6*
	QnACPU	AJ71QC24
	QCPU (A mode), ACPU	AJ71C24/UC24
MELSECNET connection	Data link system	MNET2/B
	Network system	MNET/10 (A/QnA/Q)
		MNET/10 (A)
CC-Link connection	Remote device station	CC-LINK(RD)
	Intelligent device station	CC-LINK (ID)
	Through G4	CC-LINK(G4)
Ethernet connection		QJ71E71/AJ71(Q)E71
OMRON PLC connection		OMRON SYSMAC
YASKAWA PLC Connection		YASKAWA GL/CP9200 (SH/H)/CP9300MS Series
Microcomputer connection		Microcomputer connection
Allen-Bradley PLC connection		AB SLC500, AB1: N connection
		AB Micrologix
SHARP PLC connection		SHARP JW
TOSHIBA PLC connection		TOSHIBA PROSEC T/V
SIEMENS PLC connection		SIEMENS S7-300/400
HITACHI PLC connection		HITACHI HIDIC H
		HITACHI H (Protocol 2)
MATSUSHITA Electric Works PLC connection		MATSUSHITA MEWNET-FP

Refer to the manual below for details of the connection type.

☞ GOT-A900 Series Users Manual (GT Works2 Version1/GT Designer2 Version1 compatible Connection System Manual)

4 Extended function OS

It is the program to use the following functions on the GOT.

- Ladder monitor function
- System monitor function
- Special function module function
- Network monitor function
- List editor function
- Gateway function
- Motion monitor function
- Servo amplifier monitor function
- CNC monitor function
- KANA KANJI function∗1
- Recipe function
- Sound function
- Bar code function
- Report function
- Operation panel function
- Hard copy function
- Printer output
- Creating CSV format file with alarm history function or/and recipe function

∗1 This function is dedicated to Japanese version.

(1) Combination of extended function OS that can be installed

The extended function OS is installed in the built-in memory of the GOT.

The extended function OS can be installed up to 6 in total equivalent to the number of required memories.

Either one of "ladder monitor", "motion monitor/CNC monitor" and "other" extended function OS can be installed.

Extended function OS name		Number of required memories at installation	Remark
System monitor		1	—
Ladder monitor	Ladder monitor for MESELC-A	1	Only one can be installed.
	Ladder monitor for MESELC-QnA ∗1	2	
	Ladder monitor for MESELC-Q ∗1	2	
	Ladder monitor for MESELC-FX	1	
Motion monitor ∗1		2	Only one can be installed.
CNC monitor ∗1		2	
Special unit, recipe, sound		1	—
Network monitor		1	—
List editor function for MESELC-A ∗1		2	—
Gateway (Server, client, mail, FTP) ∗1		2	—
Servo amplifier monitor ∗1		2	—
KANA KANJI (JPN) ∗1		2	—
Others ∗2	ESC printer, bar code, report, CSV, keyboard	1	Only one can be installed.
	PCL printer, bar code, report, CSV, keyboard	1	
	ESC printer, bar code, report, CSV, I/O	1	
	PCL printer, bar code, report, CSV, I/O	1	
	ESC printer, bar code, report, CSV, video/RGB	1	
	PCL printer, bar code, report, CSV, video/RGB	1	
	Chinese (Big 5) printer, bar code, report, CSV, keyboard	1	
	Chinese (Big 5) printer, bar code, report, CSV, I/O	1	
	Chinese (Big 5) printer, bar code, report, CSV, video/RGB	1	
	Chinese (GB) printer, bar code, report, CSV, keyboard	1	
	Chinese (GB) printer, bar code, report, CSV, I/O	1	
	Chinese (GB) printer, bar code, report, CSV, video/RGB	1	

∗1: When the number of required memories installed on the GOT is 4 or less, the OS may not be installed.
If the OS cannot be installed, delete all extended function OS installed on the GOT and then reinstall the extended function OS again.

∗2: Select "Other" extended function OS referring to Point on the next page.

Point Selection point of "Other" extended function OS

(1) Install "Other" extended function OS when the following functions are used.

- Report function
- Operation panel function
- Bar code function
- Video display function
- RGB display function
- External I/O function
- Printer output
- Gateway function (Send mail)
- Hard copy function (File save)
- Creating CSV format file with alarm history function or/and recipe function

(2) In "Other" extended function OS, only items of 1) (Language) and 2) (Device) below are different. Other items (bar code, report and CSV) are the same. Select "Other" extended function OS referring to 1) and 2).

1) Selection by printer connected to the GOT or language output to the CSV file

- ESC printer: : Output/send mail in Japanese
- PCL printer: : Output in English
- Chinese (Big 5) printer: : Output in Chinese (Traditional characters)
- Chinese (GB) printer: : Output in Chinese (Simplified characters)

2) Selection by optional equipment

- Keyboard : Operation panel, ten-key panel (operation panel function)
- I/O : External I/O device (external I/O function)
- Video/RGB : Video camera (video function), PC (RGB function)

(2) Relation between extended function OS and built-in OS

When the extended function OS is installed, the memory space below is always used regardless of each extended function OS data size.
If the built-in memory is not sufficient, mount the memory board on the GOT (Use - M3 type for the A95∗GOT.) to increase the built-in memory space. (The space added with the memory board is used as the memory only for the monitor data and the special data.)

Total count equivalent to required memories for extended function OS	Memory space used by extended function OS (k byte)	Space to store monitor data and special data (k byte) ∗1
0	0	1152
1	256	896
2	384	768
3	640	512
4	768	384
5	1024	128
6	1152	0

∗1 The space without the memory board (Use the type without -M3 on the A95∗GOT.) is assumed.

5 Monitor data

It is the monitor screen data created by the user.

6 Special data

It is the dedicated screen data used for the special module monitor function, motion monitor function and servo amplifier monitor function.
Refer to the manual below for details of each function.

☞ GOT-A900 Series Operating Manual (GT Works2 Version1/GT Designer2 Version1 compatible Extended • Option Functions Manual)

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5.1.2 Memory space required for data transfer

The extended function OS, monitor data and special data are transferred to the built-in memory of the GOT. If the built-in memory does not have sufficient space, the data cannot be transferred.
Check the built-in memory space and the transfer data size before transfer of the data.

Remark

Check method of memory space

(1) New data transfer (No data has been transferred to the GOT.)

1. Check the total count equivalent to the required memories for installation of the extended function OS.
   ☞ Section 5.1.1 4 (1) Combination of extended function OS that can be installed
2. Check the GOT built-in memory size used by the extended function OS from the total count equivalent to the required memories.
   ☞ Section 5.1.1 4 (2) Relation between extended function OS and built-in memory
3. Check the size of the monitor data or the special data to be downloaded.
   ☞ 2 in this section Check method of transfer data size
4. Extended function OS + Monitor data + Special data size < Remaining memory size of GOT → Installation is allowed.
   Extended function OS + Monitor data + Special data size > Remaining memory size of GOT → Installation is not allowed.

   Ex.) GOT memory size : 1152 KB (without memory board)
   Count equivalent to memories of extended function OS : 3 (640 KB)
   Monitor data : 300 KB
   Special data : 26 KB
   640 + 300 + 26 < 1152 → Installation is allowed.

(2) Data has already been transferred to the GOT.

1. Check the built-in memory.
   ☞ 1 in this section Check method of GOT space
2. Check the monitor data size or the special data size to be added.
   ☞ 2 in this section Check method of transfer data size
3. Monitor data + special data size < Remaining memory size of GOT → Installation is allowed.
   Monitor data + special data size > Remaining memory size of GOT → Installation is not allowed.

1 Check method of GOT free space

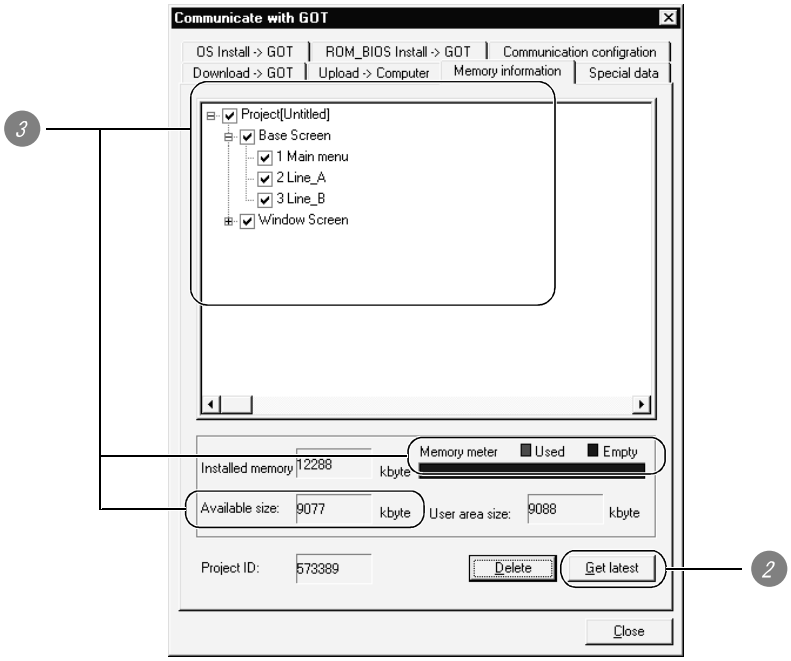
(1) Check the space with the GT Designer2.

When the space is checked with the GT Designer2, connect the GOT to the PC with the RS-232C cable.

1. Click the [Communication] → [Memory Information] menu.
2. The communication configuration dialog box (Memory information tab) appears. Click the Get Latest button.
3. The free space is indicated in the [Available space] and the [Memory meter]" of the GOT built-in memory.

   Refer to the following for details of each item in the built-in memory information.

   ☞ Item 5.2.6 Getting memory information

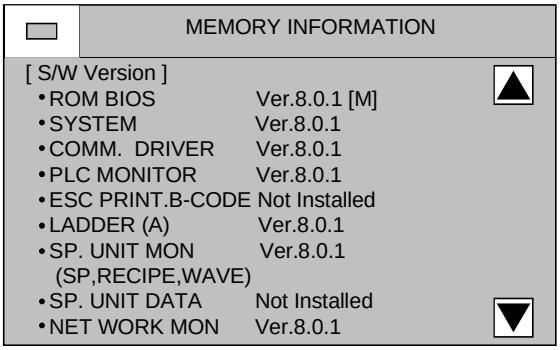


(2) Check the space with the GOT.

The space can be checked with the built-in memory information of the utility.

Refer to the manual below for start-up method and operation method of the utility.

☞ GOT-A900 Series Operating Manual (GT Works2 Version1/GT Designer2 Version1 compatible Extended • Option Functions Manual)



2 Check method of transfer data size

1 Select [Communication] → [Communicate with GOT]/[Communicate with PC Card] menu.

2 The Communicate with GOT dialog box or the Communicate with PC Card dialog box appears. Each data size can be checked in each dialog box.
Refer to the following for details of each dialog box.

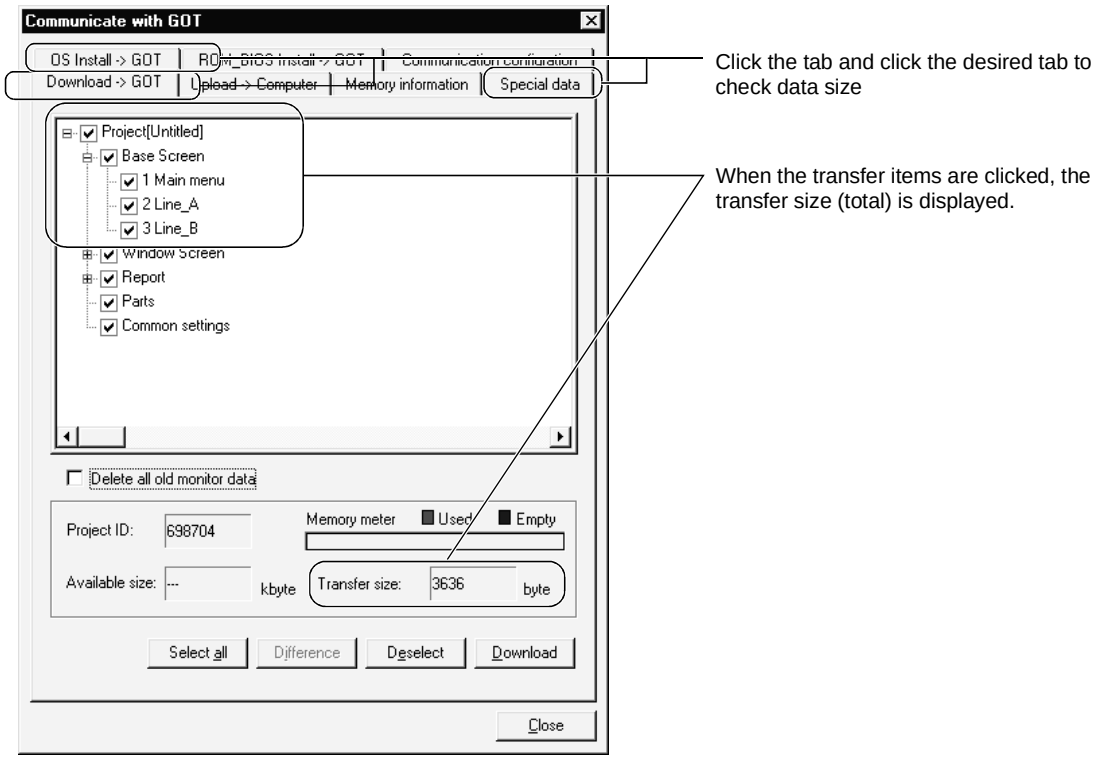
- Communicate with GOT dialog box

  5.2.4 Downloading monitor data

- Communicate with PC Card dialog box

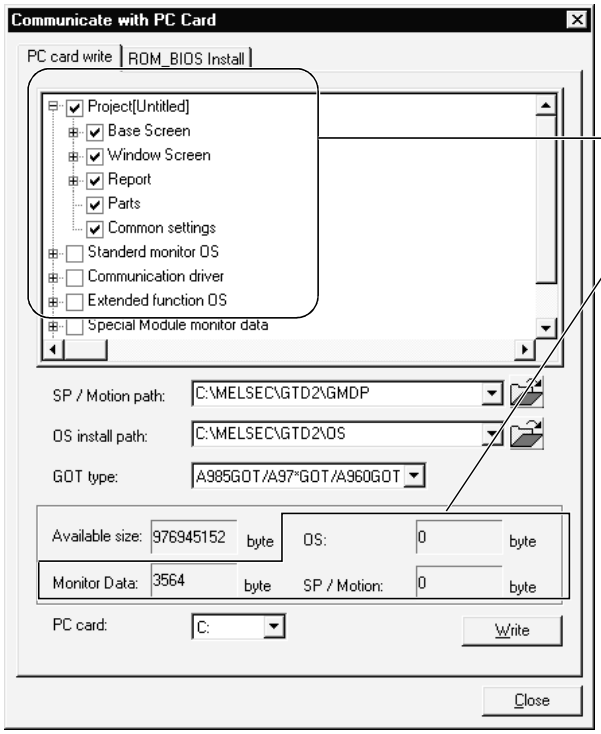
  5.3.2 Transferring OS, monitor data and special data

(1) Communicate with GOT dialog box



5 - 10

(2) Communicate with PC Card dialog box



When the transfer items are clicked, the transfer size (total) is displayed.

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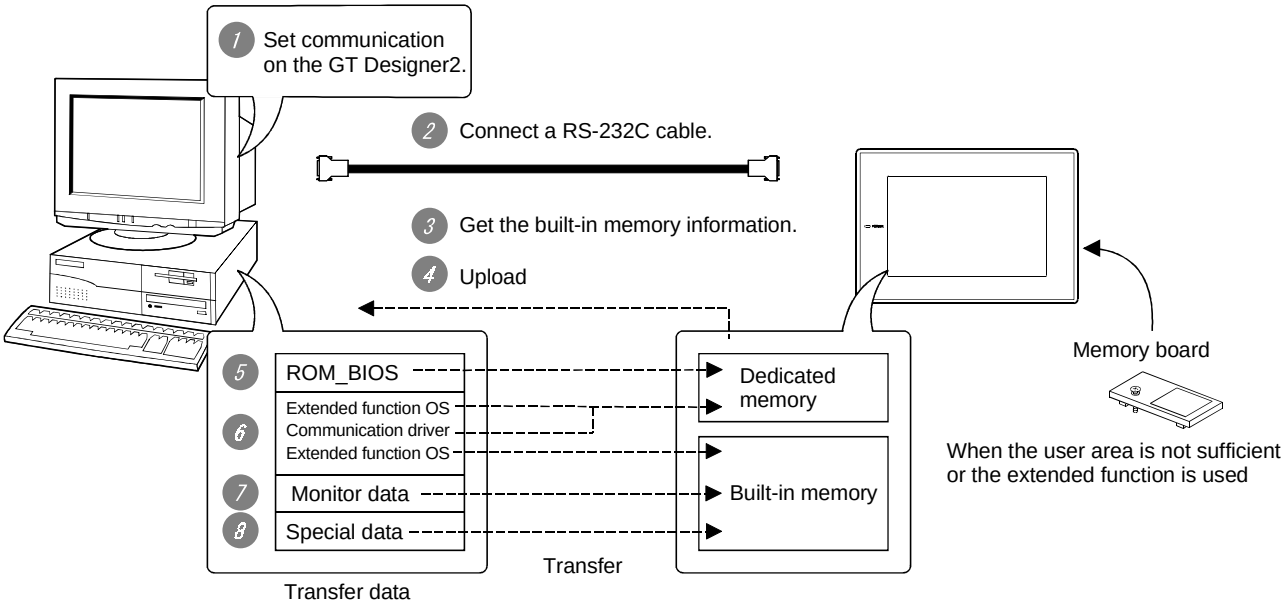
5.2 Transferring data with RS-232C cable

The data transfer method with RS-232C cable is described.
As data transfer is operated with the GT Designer2, operation on the GOT side is not necessary.

1 Procedures

The data is transferred in the following procedures.



1 Set communication on the GT Designer2..... Item 5.2.1 Setting communication

2 Connect a RS-232C cable. ..... Item 2.2.2 RS-232C cable to be used

3 Get the built-in memory information..... Item 5.2.2 Getting built-in memory information

4 Upload (Operation is not required for the first upload.)
..... Item 5.2.3 Uploading

5 ROM_BIOS (GOT-A900 Series only) ..... Item 5.2.4 Installing ROM_BIOS

6 Standard monitor OS, communication driver and extended function OS (GOT-A900 Series only)
..... Item 5.2.5 Installing OS

7 Monitor data..... Item 5.2.6 Downloading monitor data

8 Special data (GOT-A900 Series only)..... Item 5.2.7 Downloading special data

Remark Monitor data transfer

To transfer monitor data, the project must be opened on the GT Designer2.
Other data than the monitor data can be transferred when the project is not opened on the GT Designer2.

2 Caution

(1) RS-232C cable

Make sure that the RS-232C cable connector is securely connected to the GOT and the PC.

(2) Precaution for uploading

When the "upload destination" is specified as a project file (.GTD) of the GT Designer2, all data in the specified project file are deleted. (Even for a partial uploading (comment data, etc.), all data in the file are also deleted.)

(3) Monitor data uploaded from GOT

If monitor data downloaded to the GOT is uploaded again from the GOT, all tabs of the object setting dialog box are displayed.

(4) Data transfer timing

While the message "Communicating with CPU" is displayed on the GOT when the GOT power is turned ON, communication from the PC is not accepted.
Transfer the data after the message has gone.

(5) Detailed explanation and category set on project or screen

Detailed explanation and category set on the project or the screen are not downloaded to the GOT.
Therefore, they are not saved if they are uploaded again from the GOT after downloading.

(6) Data in GOT

When the same data as the data to be downloaded is present in the GOT, it is overwritten in downloading.

(7) Power saving function of PC

When data is transferred with the GOT connected, turn OFF the power saving function of the PC and Windows® .
Refer to the PC manual or Windows® Help for details of the power saving function setting.

(8) For communication error

If a communication error such as time-out error has occurred, change the communication port setting at the PC with the procedures below:

<Method 1>

1. Click the [Start] button and select and click the [Setting] - [Control Panel].
2. Double click the [System] icon to display the property dialog box of the system.
3. Select [Port] of the device manager tab and double click the [Communication Port (currently used port)] icon to display the property dialog box of the communication port.
4. Click the [Detail Setting] button of the port setting tab to display the detail setting dialog box of the port.
5. Uncheck [Use FIFO buffers].

<Method 2>

1. Click the [Start] button and select and click the [Setting] - [Control Panel].
2. Double click the [System] icon to display the property dialog box of the system.
3. Select [System Device] of the device manager tab (display for each type) and double click [Advanced Power Management] icon to display the property dialog box of the advanced power management.
4. Check [Disable power status polling] of the setting tab.

＊ Some PCs may not have the items above.

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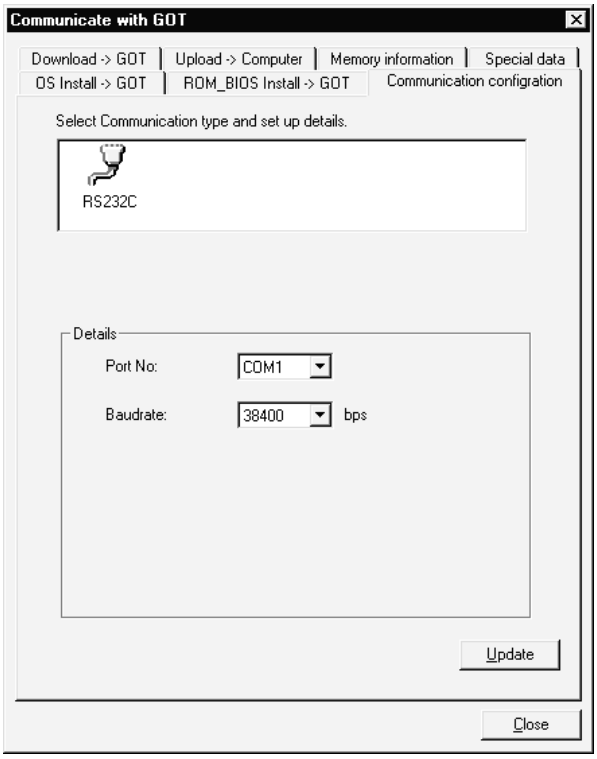
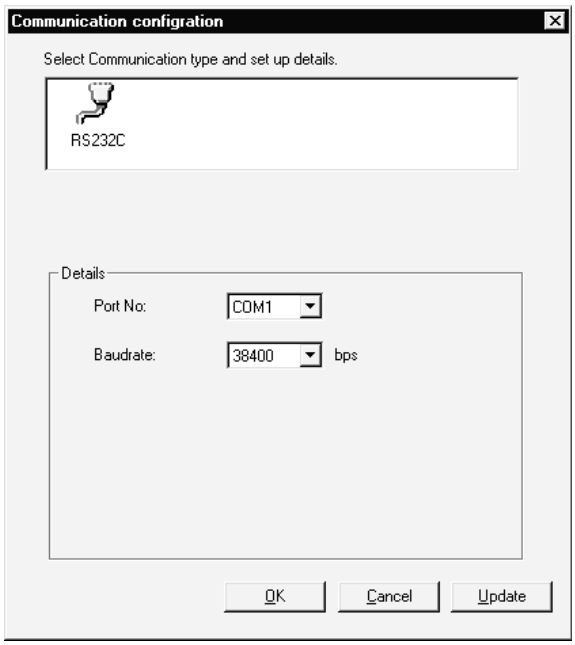
5.2.1 Setting communication

Communication setting of the PC that transfers data to the GOT is made.
Settings can be made in either the Communicate with GOT dialog box or the Communication Configuration dialog box.
(When one dialog box is set, the other dialog box automatically has the same settings.)

1. Click the [Communication] → [Communicate with GOT]/[Communication Configuration].
2. The setting dialog box appears. Make settings referring to the description below.



Communicate with GOT dialog box
(Communication configuration tab)



Communication Configuration dialog box

(GOT-A900 Series)

Item	Description	A	F
Port No.	PC port connected to the GOT is selected.	○	○
Baudrate	The transmission speed between the PC and the GOT is set. Set the rate suitable for the PC.	○	○
Update	When the settings are changed, the settings are updated. Click the Update button to update the settings.	○	○

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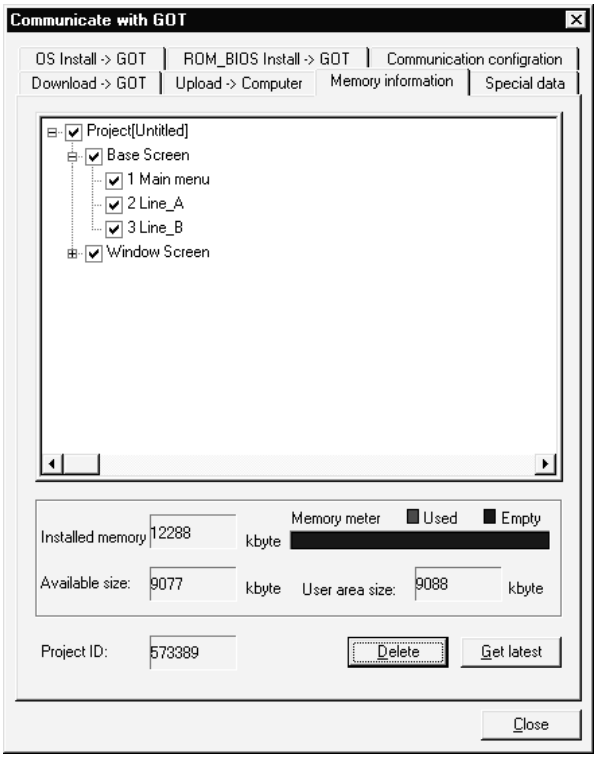
5.2.2 Getting built-in memory information

The method to check the built-in memory is shown below:

1. Click the [Communication] → [Communicate with GOT].
2. The setting dialog box appears.
   Click the Get latest button to get the built-in memory information.



Communicate with GOT dialog box (Memory information tab)

Item	Description	A	F
Built-in memory information tree ∗1	Configuration of the monitor data, special data and OS is displayed in a tree. Right click the mouse to "Select All" or "Unselect".	○	○
Installed memory ∗1	Built-in memory size of the GOT is displayed.	○	○
Available size ∗1	Size of memory that can be used by the user is displayed.	○	○
Memory meter ∗1	Area that can be used by a user is displayed as a meter.	○	○
User area size ∗1	Size of memory used by the user is displayed.	○	○
Project ID ∗1	Project ID is displayed.	○	○
Delete	Items checked in the built-in memory information tree are deleted from the built-in memory.	○	○
Get latest	Built-in information of the GOT is obtained.	○	○

∗1 It is displayed after the built-in memory is obtained.

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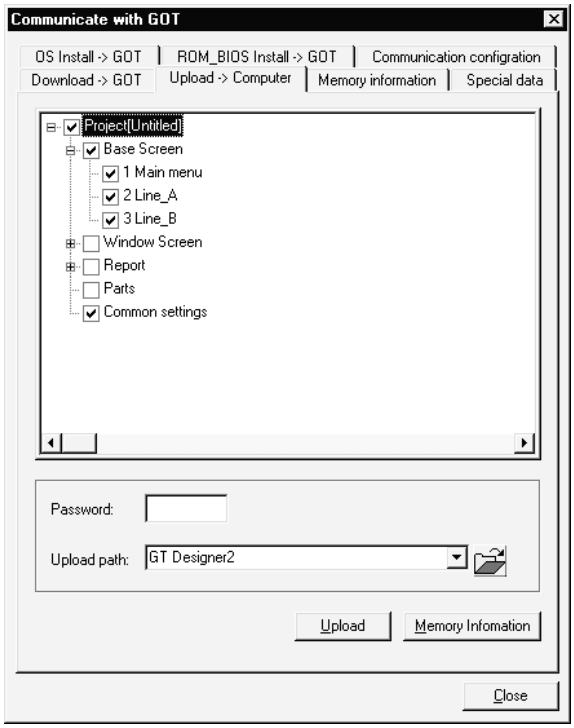
5.2.3 Uploading

When the ROM_BIOS or the OS is installed to the GOT, monitor data of the built-in memory are deleted.
To backup the monitor data, upload and save them temporarily in the PC hard disk.
The uploading method is as follows:

1. Click the [Communication] → [Communicate with GOT].
2. The setting dialog box appears. Make settings referring to the description below.
   After setting, click the Upload button to start upload.



Communicate with GOT dialog box (Upload→Computer tab)

Item	Description	A	F
Project configuration tree	Configuration of the obtained monitor data is displayed in a tree. Right click the mouse to "Select All" or "Unselect".	○	○
Password	When the password for upload is set, input the password. Each input is displayed as "*".	○	○
Upload path	Storage location of the uploaded monitor data is set. (Up to 5 historical data specified in the past are retained.) When data is uploaded in default (GT Designer2), the uploaded data are read into the currently open GT Designer2.	○	○
Upload	Items checked in the project configuration tree are uploaded. When the project configuration tree is not displayed, all monitor data of the GOT built-in memory are uploaded. If the space of the upload destination is not sufficient, uploading is interrupted.	○	○
Memory Information	Built-in memory information of the GOT is obtained.	○	○

5.2.4 Installing ROM_BIOS

Point

(1) Data installed in the GOT

When the ROM_BIOS is installed, the monitor data, special data and OS in the GOT are deleted.
If the data must be retained, upload them in advance.

(2) During installation of ROM_BIOS

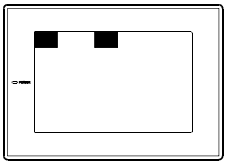
Once the ROM_BIOS installation is started, it cannot be interrupted.
Do not turn OFF the power of the GOT/PC or unplug the communication cable to interrupt. Otherwise, the GOT may became inoperable.

<GOT recovery method>

If the GOT goes down due to the operation above, install the system program again by the following procedure:

* Remove the communication module/board or optional module mounted on the GOT (remove the communication cable for the communication interface built-in GOT) before installation.

1. Turn OFF the GOT.
2. Turn ON the GOT while pressing two locations shown below on the GOT at the same time.

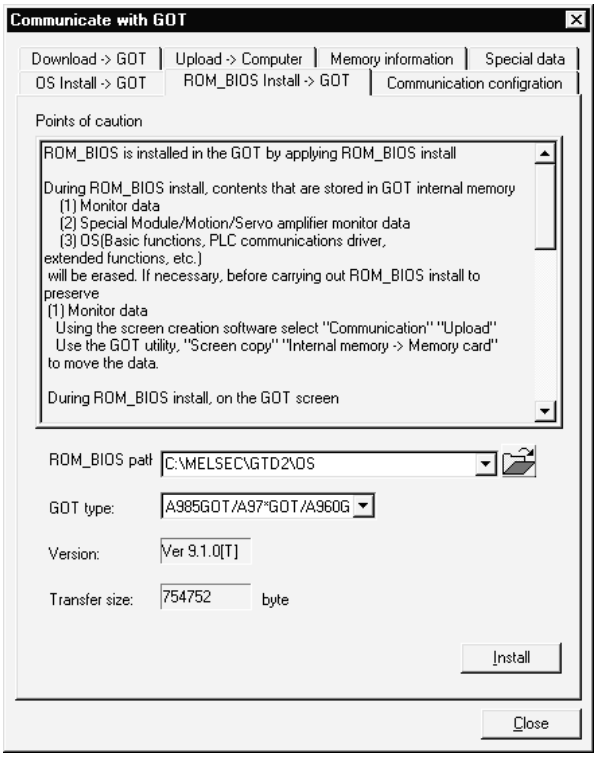


3. Message "Reinstall the ROM_BIOS/OS" appears on the GOT.
4. Complete installation according to the GOT instruction.

If the GOT is not recovered by the above method, contact your local Mitsubishi service center or representative.

Installation method of the ROM_BIOS is shown below:

1. Click the [Communication] → [Communicate with GOT].
2. The setting dialog box appears. Click the ROM_BIOS Install -> GOT tab. Refer to the following description for setting.
   After setting, click the Install button to start installation.


Communicate with GOT
Download -> GOT
Upload -> Computer
Memory information
Special data
OS Install -> GOT
ROM_BIOS Install -> GOT
Communication configration
Points of caution
ROM_BIOS is installed in the GOT by applying ROM_BIOS install
During ROM_BIOS install, contents that are stored in GOT internal memory
(1) Monitor data
(2) Special Module/Motion/Servo amplifier monitor data
(3) OS(Basic functions, PLC communications driver, extended functions, etc.)
will be erased. If necessary, before carrying out ROM_BIOS install to preserve
(1) Monitor data
Using the screen creation software select "Communication" "Upload"
Use the GOT utility, "Screen copy" "Internal memory -> Memory card"
to move the data.
During ROM_BIOS install, on the GOT screen
ROM_BIOS path
C:\MELSEC\GTD2\OS
GOT type:
A985GOT/A97*GOT/A960G
Version:
Ver 9.1.0[T]
Transfer size:
754752
byte
Install
Close

Communicate with GOT dialog box (ROM_BIOS Install→GOT tab)

Item	Description	A	F
Points of caution	Points of caution are described for installation of the ROM_BIOS. Be sure to read this before installation.	○	×
ROM_BIOS path	Path (drive, folder) that stores the ROM_BIOS to be installed is specified. (Up to 5 historical data specified in the past are retained.)	○	×
GOT type	The type of GOT to which the ROM_BIOS is installed is selected.	○	×
Version	Version of the ROM_BIOS is displayed.	○	×
Transfer size	Size of the ROM_BIOS to be transferred is displayed.	○	×
Install	The ROM_BIOS is installed.	○	×

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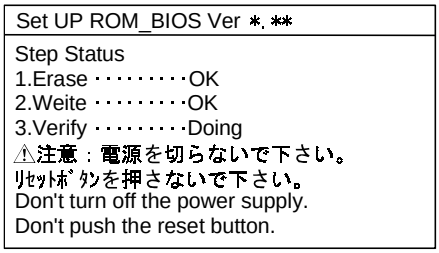
3 After installation, reset the GOT to start rewriting the ROM_BIOS.

Never turn OFF the power of the GOT or press the reset switch during rewriting. The GOT may became inoperable.



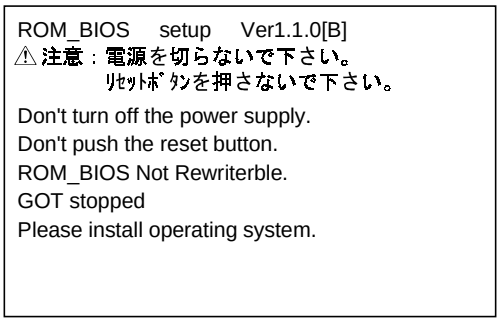
GOT screen during rewriting ROM_BIOS

4 After rewriting, message "Cycle power on unit" appears.

5 After resetting, transfer the OS or the monitor data.

Remark Installing ROM_BIOS of old version

When the GOT is reset to install the old version ROM_BIOS, the following message appears and the GOT stops. (The old version ROM_BIOS cannot be rewritten.)



When the message appears, transfer the OS or monitor data with the above screen status.

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5.2.5 Installing OS

Point

(1) Data installed in the GOT

When the OS is installed, the monitor data and special data in the GOT are deleted.
If the data must be retained, upload them in advance.

(2) During installation of OS

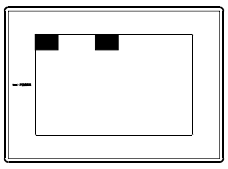
The OS installation, it can be interrupted. (Reinstallation of the OS is required.)
Do not turn OFF the power of the GOT/PC or unplug the communication cable. Otherwise, the GOT may became inoperable.

<GOT recovery method>

If the GOT goes down due to the operation above, install the system program again by the following procedure:

* Remove the communication module/board or optional module mounted on the GOT (remove the communication cable for the communication interface built-in GOT) before installation.

1. Turn OFF the GOT.
2. Turn ON the GOT while pressing two locations shown below on the GOT at the same time.



3. Message "Reinstall the ROM_BIOS/OS" appears on the GOT.
4. Complete installation according to the GOT instruction.

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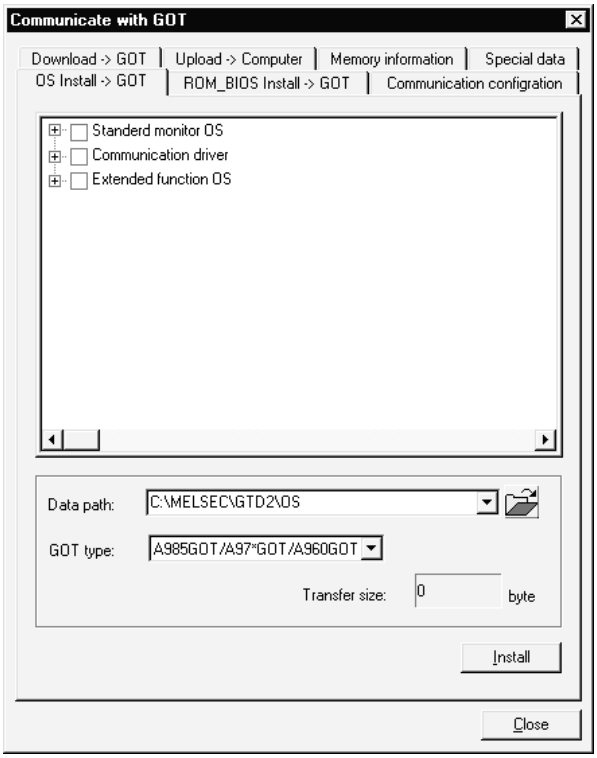
Installation method of the OS (standard monitor OS, communication driver, extended function OS) is shown below:

1 Click the [Communication] → [Communicate with GOT].

2 The setting dialog box appears. Click the OS Install -> GOT tab. Refer to the following descriptions for setting.
After setting, click the Install button to start installation.



Communicate with GOT dialog box (OS Install → GOT tab)

Item	Description	A	F
Function tree	The standard monitor OS, communication driver and extended function OS are displayed in a tree. Check the desired item for installation. Refer to the following for details of items to be selected. Communication driver Section 5.1.1 3 Communication driver Extended function Section 5.1.1 4 Extended function OS	○	×
Data path	Path (drive, folder) that stores the OS to be installed is specified. (Up to 5 historical data specified in the past are retained.)	○	×
GOT type	The type of GOT to which the OS is installed is selected.	○	×
Transfer size	Size of the OS selected in the "function tree" is displayed.	○	×
Install	The OS is installed.	○	×

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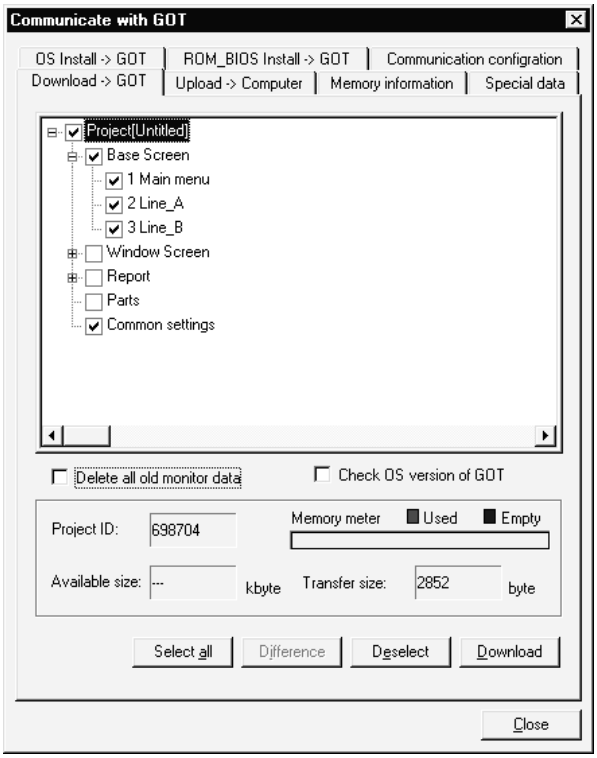
5.2.6 Downloading monitor data

Installation method of the monitor data is shown below:

1. Click the [Communication] → [Communicate with GOT].
2. The setting dialog box appears. Refer to the following descriptions for setting.
   After setting, click the [Download] button to start installation.



Communicate with GOT dialog box (Download→GOT tab)

Item	Description	A	F
Project configuration tree	The project configuration tree is displayed. Check the desired item for downloading. Right click the mouse to "Select All" or "Unselect".	○	○
Delete all old monitor data	After deleting the monitor data already downloaded to the GOT, this is checked to download this monitor data.	○	○
Project ID	Project ID is displayed.	○	○
Available size	When the built-in memory information has the memory information of the GOT, the available size for a user is displayed.	○	○
Check OS version of GOT	Check this to check the basic OS version of the GT Designer2 and the basic OS version installed on the GOT. If the basic OS version installed on the GOT is older than the GT Designer2 OS version, a message to prompt reinstallation of the OS appears in downloading.	○	○
Memory meter	When the built-in memory information has the memory information of the GOT, the available size for the user is displayed as a meter.	○	○
Transfer size	Size of the monitor data selected in the project configuration tree is displayed.	○	○

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Item	Description	A	F
Select All	All items in the project configuration tree are selected.	○	○
Difference	If download has been performed during editing, items subsequently changed in the project configuration tree are checked. After selection, click the Download button to download the edited items only. When data has not been downloaded, this is not available. When the project is closed, Difference cannot be selected.	○	○
Deselect	All items selected in the "project configuration tree" are deselected. (Items for common settings are not deselected.)	○	○
Download	The monitor data is downloaded.	○	○

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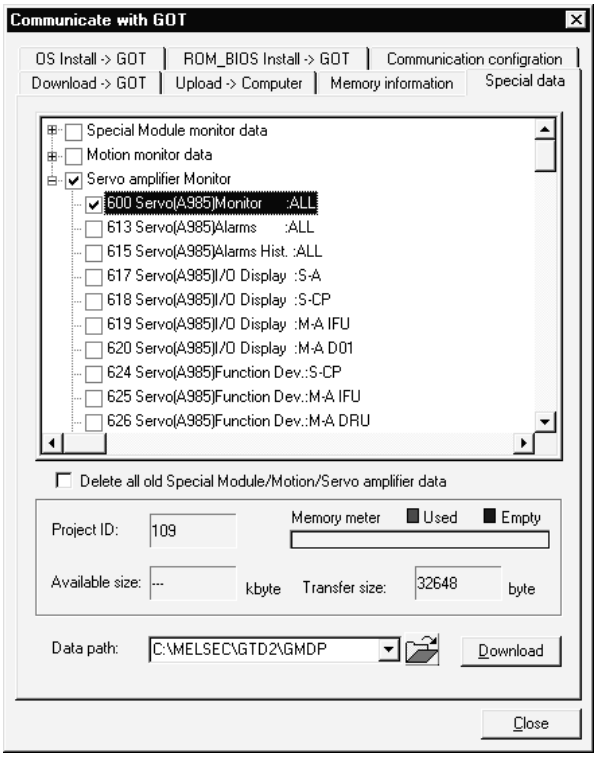
5.2.7 Downloading special data

Downloading method of the special data is shown below:

1. Click the [Communication] → [Communicate with GOT].
2. The setting dialog box appears. Click the Special data tab and refer to the following descriptions for setting.
   After setting, click the [Download] button to start downloading.



Communicate with GOT dialog box (Special data tab)

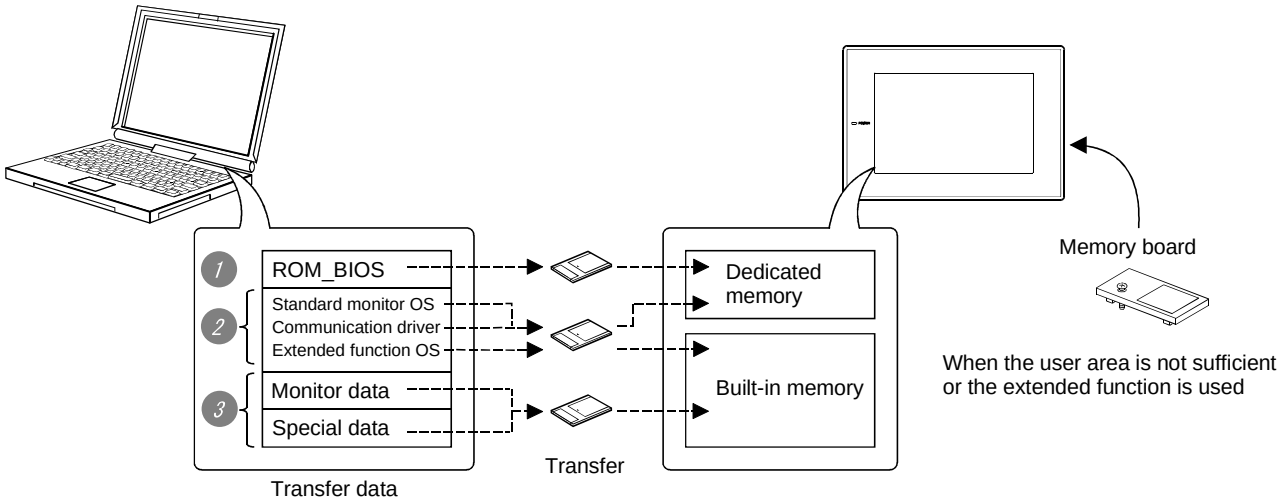
Item	Description	A	F
Special data tree	The special data are displayed in a tree. Check the desired item for downloading. Right click the mouse to "Select All" or "Unselect".	○	×
Delete all old Special module/Motion/Servo amplifier data	After deleting the special data already downloaded to the GOT, this is checked to download this special data.	○	×
Project ID	Project ID is displayed.	○	×
Available size	When the built-in memory information has the memory information of the GOT, the available size for the user is displayed.	○	×
Memory meter	When the built-in memory information has the memory information of the GOT, the available size for the user is displayed as a meter.	○	×
Transfer size	Size of the monitor data selected in the project configuration tree is displayed.	○	×
Data path	Path (drive, folder) that stores the project of the special data to be downloaded is specified. (Up to 5 historical data specified in the past are retained.)	○	×
[Download]	The special data is downloaded.	○	×

5.3 Transferring Data Using PC Card

Data transfer method with the PC card is described.
With a PC card, it is not necessary to carry a PC or cable.
The data transfer time is faster than that of the communication with the RS-232C cable.＊1
The working time can be reduced.

1 Procedures

Data is transferred with the procedures below.



＊1 Reference value.... For screen data (589,572 bytes (30 screens)), approx. 55 sec. for PC card and approx. 5 min. for RS-232 cable
＊2 When the GOT-F900 Series is used, data cannot be transferred with the PC card.
＊3 Data in 2 and 3 can be transferred at the same time depending on the PC card size.

1 ROM_BIOS ..... Section 5.3.1 Installing ROM_BIOS

2 Standard monitor OS, communication driver and extended function OS
. . . . . Section 5.3.2 Transferring OS, monitor data and special data

3 Monitor data and special data
. . . . . Section 5.3.2 Transferring OS, monitor data and special data

Remark

Monitor data transfer to PC card

To transfer monitor data from the PC to the PC card, the project must be opened on the GT Designer2.
Other data than the monitor data can be transferred even if the project is not opened on the GT Designer2.

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2 Precautions

(1) Module mounted on the GOT

When data are transferred, remove the communication module/board and extended module mounted on the GOT.

When the GOT has the built-in communication interface, remove the communication cable.

(2) Detailed explanation and category set on project or screen

Detailed explanation and category set on the project or screen are not downloaded to the GOT. After downloading, they are not saved when they are uploaded again from the GOT.

(3) Transfer method of monitor data to PC card

Be sure to transfer the monitor data from the GT Designer2 to the PC card.

If data is copied with Explorer of the PC, the GOT cannot check the data in the PC card.

(4) Data in GOT/PC card

When the same data as the data to be downloaded is already present in the GOT/PC card, it is overwritten in downloading.

(5) PC card format

Format the PC card before use.

The following format methods are available:

(a) Format with PC (SRAM type, flash PC card)

Format the PC card on the PC satisfying the conditions below:

1) The PCMCIA card slot is available.

2) Windows 98, Windows Me or Windows 2000 is installed.
(The PC card cannot be formatted with Windows NT 4.0.)

Point Formatting with PC

Format the PC card for the GOT using either of the following type:

- SRAM type PC card : FAT16
- Flash PC card : FAT16, FAT32

To make the SRAM type PC card recognized on Windows© 98, statement must be added to config.sys.

Refer to Help of Windows© 98 for details.

(b) Format with self-diagnosis (memory card check) of utility menu

Only the SRAM type PC card can be used.

Refer to the GOT-A900 Series operating manual (Extended functions and Optional functions corresponding to GT Works2 Version1/GT Designer2 Version1) for details of the utility menu.

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5.3.1 Installing ROM_BIOS

Point

(1) Using PC card

Do not put other data in the PC card which is used to install the ROM_BIOS.
All other data are deleted when the ROM_BIOS is installed.

(2) Installing ROM_BIOS

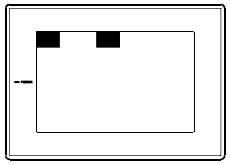
The ROM_BIOS installation, it cannot be interrupted.
Do not turn OFF the power of the GOT/PC or unplug the communication cable.
Otherwise, the GOT may become inoperable.

<GOT recovery method>

If the GOT is inoperable due to the operation above, install the system program again with the procedure below:

* Remove the communication module/board or optional module mounted on the GOT (remove the communication cable for the communication interface built-in GOT) before installation.

1. Turn OFF the GOT.
2. Turn ON the GOT while pressing two locations shown below on the GOT at the sametime.



3. Message "Reinstall the ROM_BIOS/OS" appears on the GOT.
4. Complete installation according to the GOT instruction.

If the GOT is not recovered with the above method, contact your local Mitsubishi service center or representaive.

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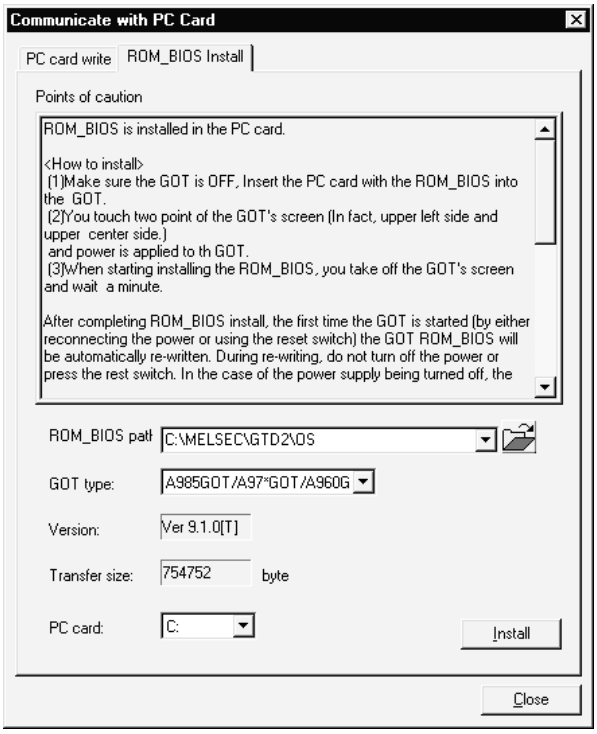
Installation method of the ROM_BIOS is shown below:

1 Write method to PC card

1. Click the [Communication] → [Communicate with GOT].
2. The setting dialog box appears. Refer to the following description for setting.
   After setting, click the Install button to start saving on the PC card.


Communicate with PC Card
PC card write
ROM_BIOS Install
Points of caution
ROM_BIOS is installed in the PC card.
<How to install>
(1)Make sure the GOT is OFF, Insert the PC card with the ROM_BIOS into the GOT.
(2)You touch two point of the GOT's screen (In fact, upper left side and upper center side.)
and power is applied to th GOT.
(3)When starting installing the ROM_BIOS, you take off the GOT's screen and wait a minute.
After completing ROM_BIOS install, the first time the GOT is started (by either reconnecting the power or using the reset switch) the GOT ROM_BIOS will be automatically re-written. During re-writing, do not turn off the power or press the rest switch. In the case of the power supply being turned off, the
ROM_BIOS path
C:\MELSEC\GTD2\OS
GOT type:
A985GOT/A97*GOT/A960G
Version:
Ver 9.1.0[T]
Transfer size:
754752
byte
PC card:
C:
Install
Close

Communicate with GOT dialog box (ROM_BIOS Install tab)

Item	Description	A	F
Points of caution	Points of caution are described for installation of the ROM_BIOS. Be sure to read this before installation.	○	×
ROM_BIOS path	Path (drive, folder) that stores the ROM_BIOS to be installed is specified. (Up to 5 historical specified in the past are retained.)	○	×
GOT type	The type of GOT to which the ROM_BIOS is installed is selected.	○	×
Version	Version of the ROM_BIOS is displayed.	○	×
Transfer size	Size of the ROM_BIOS to be transferred is displayed.	○	×
PC card	Drive assigned to the PCMCIA slot is selected.	○	×
Install	The ROM_BIOS is installed on the PC card. After installation, the dialog box (Completed) appears.	○	×

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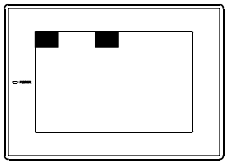
2 Installation method on GOT

1. Turn OFF the GOT.
2. Mount the PC card to the GOT.
3. Turn ON the PC card access switch.
4. Turn ON the power while pressing two locations shown below on the GOT screen.



5. Message "The system will be initialized" appears on the GOT. The ROM_BIOS is installed.
6. After installation, message "Cycle power on unit" appears on the GOT.
7. After resetting, the ROM_BIOS is automatically rewritten.
   Never turn OFF the power of the GOT or press the reset switch during rewriting.

Set UP ROM_BIOS Ver *. **
Step Status 1.Erase・・・・・・・・・OK 2.Weite・・・・・・・・・OK 3.Verify・・・・・・・・・Doing ⚠注意：電源を切らないで下さい。 ﾘｾｯﾄﾎﾞﾀﾝを押さないで下さい。 Don't turn off the power supply. Don't push the reset button.

GOT screen during rewriting ROM_BIOS

8. After rewriting, message "Cycle power on unit" appears on the GOT.
9. After resetting, transfer the OS or the monitor data.

Remark Installing ROM_BIOS of old version

When the GOT is reset to install the old version ROM_BIOS, the message below appears and the GOT stops. (The old version ROM_BIOS cannot be rewritten.)

ROM_BIOS setup Ver1.1.0[B]
⚠注意：電源を切らないで下さい。 ﾘｾｯﾄﾎﾞﾀﾝを押さないで下さい。 Don't turn off the power supply. Don't push the reset button. ROM_BIOS Not Rewriterble. GOT stopped Please install operating system.

When the message appears, transfer the OS or the monitor data with the above screen status.

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5.3.2 Transferring OS, monitor data and special data

Point

(1) Data installed in the GOT

When the OS is installed, the monitor data and special data in the GOT are deleted.
If the data must be retained, upload them in advance.

(2) During installation of OS

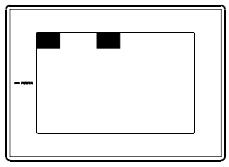
The OS installation, it can be interrupted. (Reinstallation of the OS is required.)
Do not turn OFF the power of the GOT/PC or unplug the communication cable. Otherwise, the GOT may become inoperable.

<GOT recovery method>

If the GOT is inoperable due to the operation above, install the system program again with the procedure below:

* Remove the communication module/board or optional module mounted on the GOT (remove the communication cable for the communication interface built-in GOT) before installation.

1. Turn OFF the GOT.
2. Turn ON the GOT while pressing two locations shown below on the GOT at the same time.



3. Message "Reinstall the ROM_BIOS/OS" appears on the GOT.
4. Complete installation according to the GOT instruction.

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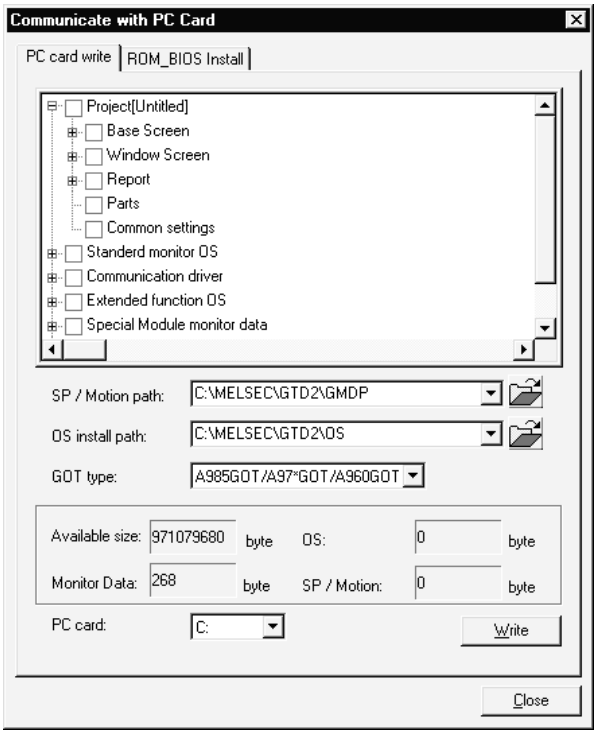
Transfer method of the OS, monitor data and special data is shown below:

1 Write method to PC card

1. Click the [Communication] → [Communicate with PC Card].
2. The setting dialog box appears. Refer to the following descriptions for setting.
   After setting, click the Write button to start writing to the PC card.



Communicate with PC Card dialog box (PC card write tab)

Item	Description	A	F
Project configuration tree	The project configuration tree is displayed in a tree. Check the desired item for downloading. Right click the mouse to "Select All" or "Unselect".	○	×
SP/Motion path	Path (drive, folder) that stores the data to be installed is specified. (Up to 5 historical data specified in the past are retained.)	○	×
OS install path		○	×
GOT type	The type of GOT to which the data is transfered is selected.	○	×
Available size	When the built-in memory information has the memory information of the GOT, the available size for the user is displayed.	○	×
Monitor data	When the built-in memory information has the memory information of the GOT, the data size used for each data is displayed.	○	×
OS		○	×
SP/Motion		○	×
PC card	Drive assigned to the PCMCIA slot is selected.	○	×
Write	Data are written on the PC card.	○	×

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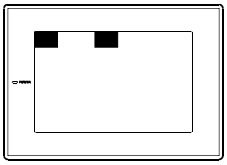
2 Installation method on GOT

1. Turn OFF the GOT.
2. Mount the PC card to the GOT.
3. Turn ON the PC card access switch.
4. Turn ON the power while pressing two locations below on the GOT screen.



5. Message "Monitor data is installed" appears on the GOT. The OS and the monitor data are installed.

Hint!

Downloading monitor data and special data

The monitor data and the special data can be downloaded with the GOT utility (screen & OS copy).
Refer to the manual below for details of the GOT utility:

☞ GOT-A900 Series Operating Manual (GT Works2 Version1/GT Designer2 Version1 compatible Extended • Option Functions Manual)

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5.4 Error Message for Data Transfer

1 Communication setting (☞ Section 5.2.1 Setting communication)

Error No.	Error message	Error definition and cause	Corrective action
–	Invalid communication port is using.	The communication port has not been set.	Set the "Communication port" to the port used for connection of the communication cable to the GOT.

2 Built-in memory (☞ Section 5.2.2 Getting built-in memory information)

Error No.	Error message	Error definition and cause	Corrective action
–	Memory information for deleting is not selected.	Deletion item is not selected from the built-in memory.	Select the deletion item from the built-in memory.

3 Upload → PC (☞ Section 5.2.3 Upload)

Error No.	Error message	Error definition and cause	Corrective action
0285	Password Error	The input password is incorrect.	Input the correct password.
–	Invalid folder is specified. Please specify the correct folder.	Invalid upload destination folder (e.g. non-existing folder) is specified.	Specify the valid upload destination folder.

4 ROM_BIOS install → GOT (☞ Section 5.2.4 Installing ROM_BIOS)

Error No.	Error message	Error definition and cause	Corrective action
0289	GOT type error	The GOT type setting is incorrect.	Select the same "GOT type" as the GOT to be used.
–	Effective ROM_BIOS is not existed in the specified folder. Please specify the correct folder.	Valid ROM_BIOS folder is not present in the specified folder.	Specify the valid ROM_BIOS folder.

5 OS install → GOT (☞ Section 5.2.5 Installing OS)

Error No.	Error message	Error definition and cause	Corrective action
0289	GOT type error	The GOT type is incorrect.	Select the same "GOT type" as the GOT for installation of the OS.
–	OS is not selected for Installing.	Item to be installed is not selected.	Select the item in the "function tree".
–	7 or more memories cannot be selected from the extended function OS. Please reduce to a maximum of 6 memoies.	The extended function OS to be installed exceeds the number of required memories (6) that can be installed on the GOT.	Select the extended function OS to be installed so that the number of the required memories may be within 6. (☞ Section 5.1.1, 4 Extended function OS)
–	Effective OS is not existed in the specified folder. Please specify the correct folder.	The valid OS file is not found in the specified folder.	Specify the valid OS folder.
–	Installing Extended function OS is in conflict with already installed. Please install again after deleting the installed function.	The selected function is competing with the function already installed on the GOT. They cannot be operated at the same time on the GOT. (e.g. MELSEC-A ladder monitor and MELSEC-Q ladder monitor)	Delete the function installed on the GOT with the "built-in memory information" and reinstall it. (☞ Section 5.2.2 Getting built-in memory information)

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Error No.	Error message	Error definition and cause	Corrective action
—	If the selected OS is installed, the number of allowable extended function OS memories is exceeded. Please reduce to a maximum of 6 memoies.	There is no space on the GOT to install the selected extended function OS.	Check the extended function OS installed on the GOT with the "built-in information". Select the item so that the equivalent number of the required memories may be within 6 including the extended function OS to be installed. (☞ Section 5.2.2 Getting built-in memory information) (☞ Section 5.1.1, 4 Extended function OS)
—	The version of ROM_BIOS installed in the GOT is not compatible with the CNC monitor and the KANA KANJI (JPN) extended OS. Please install a more up to date ROM_BIOS version.	The ROM_BIOS installed in the GOT is not compatible with the CNC monitor and the KANA KANJI (JPN).	Install the ROM_BIOS compatible with the CNC monitor and the KANA KANJI (JPN). (☞ Section 5.1.1, 1 ROM_BIOS)

* When the extended function OS that uses two or more required memories is installed, the extended function OS may not be installed with the action above.
If it cannot be installed, delete all extended function OS installed on the GOT with the "built-in memory information" and reinstall the extended function OS again.

6 Download → GOT (☞ Section 5.2.6 Downloading monitor data)

Error No.	Error message	Error definition and cause	Corrective action
0015	Please make sure of transfering data size.	The GOT built-in memory space runs out during download. Further data cannot be downloaded.	Check items written to the GOT with the "built-in memory information". Delete items written to the GOT and download the data again. (☞ Section 5.2.2 Getting built-in memory information)
			Add more memory to the built-in memory of the GOT. (Mounting memory board/using-M3 type)
0270	Transfer size error	Since the data size to be downloaded is larger than the GOT user area size, the data cannot be downloaded.	Check the user area size with the "built-in memory information" and download the data again. (☞ Section 5.2.2 Getting built-in memory information)
			Add the GOT memory. (Mounting memory board/Using -M3 type)

7 Special data (☞ Section 5.2.7 Downloading special data)

Error No.	Error message	Error definition and cause	Corrective action
—	Special Module/Motion/Servo amplifier Monitor Module Data is not selected.	The special data to be downloaded is not selected.	Select the special data to be downloaded.
—	Effective Special Module/Motion/Servo amplifier monitor data is not existed in the specified folder. Please specify the correct folder.	The valid special data file is not present in the specified folder.	Specify the folder that has the valid special data.

8 Communication

Error No.	Error message	Error definition and cause	Corrective action
0008 to 0014	Please make sure of communicatoin.	Transfer data with the GOT has an error.	Check the cable.
0259	Timeout error	The cable is unplugged. The cable is broken..	Check the cable.
		The GOT is not responding.	Check the GOT condition.
		Communication with the GOT is unstable. An error has occurred in communication.	Set the lower "transmission speed" in the "communication configuration" than the current value. (☞ Section 5.2.1 Setting communication)
0260	Port open error	Non-existing communication port is set.	Set the port that connects the communication cable to the GOT to the "communication port" of the "communication configuration". (☞ Section 5.2.1 Setting communication)
0263	Recieve error	Data cannot be received from the GOT. Data received from the GOT has an error.	Check the cable.
0264	Send error	Data cannot be transmitted to the GOT.	Check the cable.
0289	GOT type error	With the communication dialog for the GOT-A900 Series, communication with non-GOT-A900 Series is performed.	Connect the GOT-A900 Series.
		With the communication dialog for the GOT-F900 Series, communication with non-GOT-F900 Series is performed.	Connect the GOT-F900 Series.

9 PC card (☞ Section 5.3.2 Write method to PC card)

Error No.	Error message	Error definition and cause	Corrective action
0288	Create Directory Error	The drive where the PC card is set is not specified.	Select the drive where the PC card is set in "PC card".
		The PC card is write protected.	Disable the write protect of the PC card.
—	OS is not selected for Installing.	The item to be installed is not selected.	Select the item to be installed in the "project configuration tree".
—	7 or more memories cannot be selected from the extended function OS. Please reduce to a maximum of 6 memoies.	The extended function OS to be installed exceeds the number of required memories (6) that can be installed on the GOT.	Select the extended function OS to be installed so that the number of the required memories may be within 6. (☞ Section 5.1.1, 4 Extended function OS)
—	CNC monitor and KANA KANJI(JPN) extended OS are compatible with ROM_BIOS Ver 9.2.2[W] or later. When installing to the GOT, please check that the ROM_BIOS is Ver 9.2.2[W] or later Continue writing. OK?	The left message is always displayed when [CNC monitor] or [KANA KANJI (JPN)] is selected in the [Project configuration tree].	Check the ROM_BIOS version installed within the GOT. (☞ Section 5.1.1 1 ROM_BIOS)

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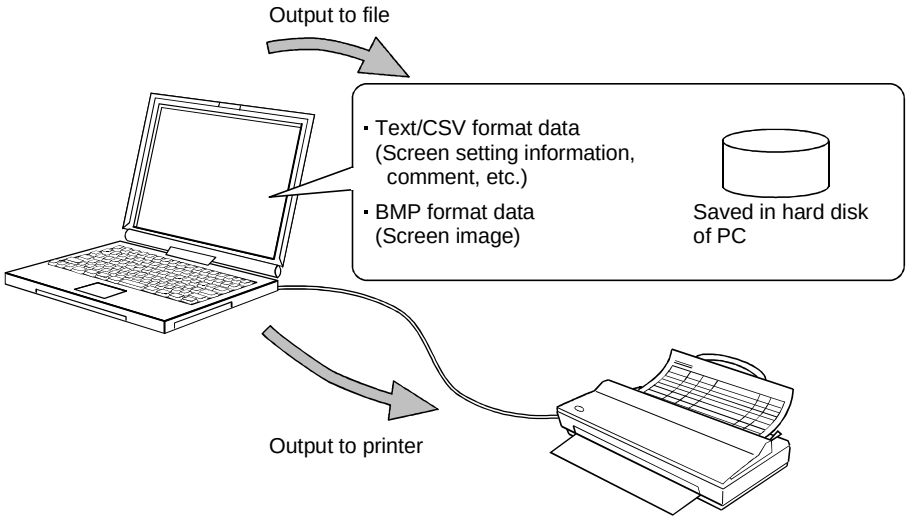
6. PRINTING PROJECT/FILE OUTPUT

Project settings or screen image created on the GT Designer2 can be output to a file or printer.
The data output to a file can be used for various documents after editing with a commercially available word processor software.



Point Print setting

(a) Papers are printed in the portrait mode.

(b) Font and font size for printing cannot be changed.

(c) The header information (date, file name) are automatically printed when output to a printer.

6.1 Printing method

6.1.1 Setting method

1. Select the [Project] → [Print].
2. The print setting dialog box appears. Refer to the following description for setting.

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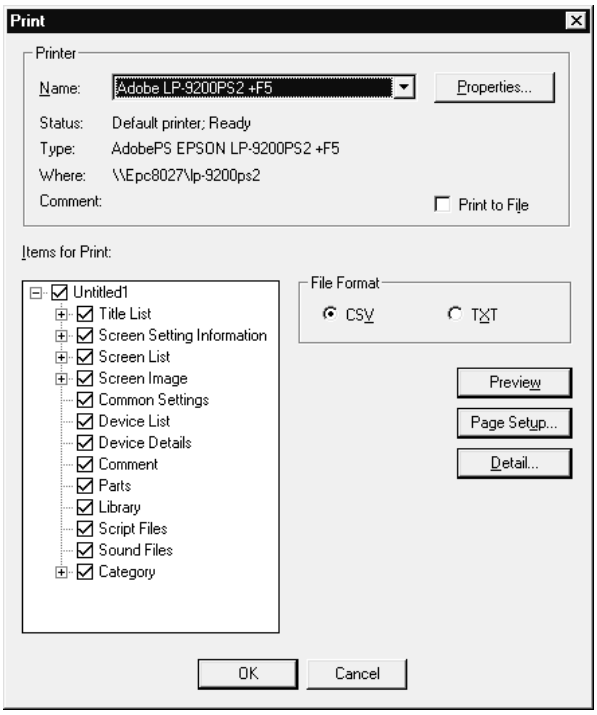
6.1.2 Setting items

Setting items for printing are described.



Item		Description	A	F
Printer	Name	Select the printer for printing. To make basic settings of the printer, click the [Properties] button. Printer setting varies depending on the printer driver of Windows.	○	○
	Print to file	Save the data in a file without printing from the printer. Check [Print to file] and click the [OK] button. The Save as dialog box is displayed. Set the file target.	○	○
Items for print		Select the items to be printed. Refer to the following for the print image of each item: ☞ Section 16.2 Print example	○	○
File format		When data are written to files, select the file format (CSV/TXT).	○	○
Preview ∗1		Preview in printing is displayed.	○	○
Page setup ∗2		Set the page or screen image to be printed.	○	○
Detail ∗3		Set each screen's details and select the device used for printing.	○	○

Refer to the next page for details of ∗1 to ∗3.

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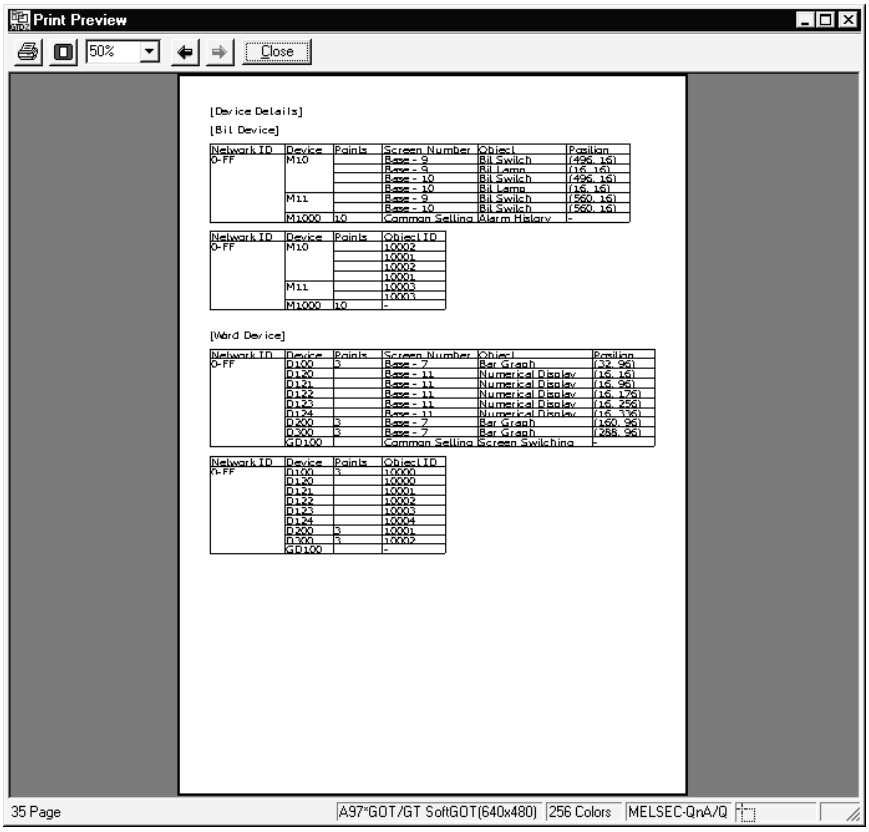
*1 Print preview

Each icon of print preview is described.



Item	Description	A	F
(Print)	Printing is performed.	○	○
(One page)	The entire page is displayed.	○	○
50% (Zoom)	The display image is enlarged/reduced.	○	○
(Previous, Next)	Image on the previous/next page is displayed.	○	○
Close (Close)	Print Preview is closed.	○	○

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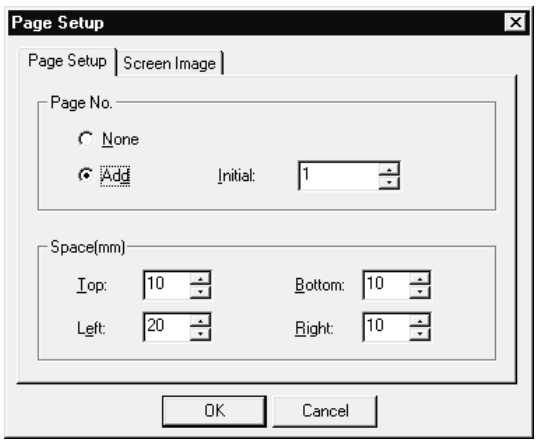
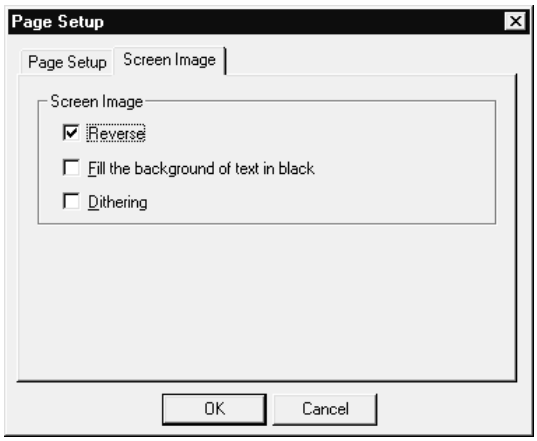
✻2 Page Setup

(1) Page Setup tab



Item	Description	A	F
Page No.	Select whether page No. to be added or not. If [Add] is selected, set the page No. (“initial value”) to be printed on the first page. (0 to 9999)	○	○
Space	Set the top/bottom/right/left space in mm units. (0 to 100mm)	○	○

(2) Screen Image tab



Item	Description	A	F
Reverse	Check this item to output the screen image with black and white inverted.	○	○
Fill the background of text in black	Check this item to output the text in the black background.	○	○
Dithering	Check this item to convert the screen image into black and white, apply monochrome dithering to the image and output it.	○	○

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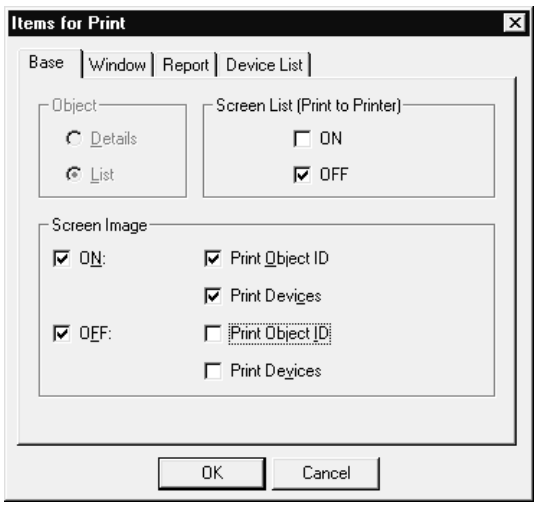
*3 Detail

(1) Base/Window tab



Base tab

Item		Description	A	F
Object		Select whether the object setting to be output in [List] or [Details] format for the screen setting check. Selectable only for output to file. (Fixed to [List] for output to printer.)	○	○
Screen List		Set the image (ON/OFF) to be output to a screen list. When both are checked, both of ON and OFF screen images are output. When neither of them is checked, no screen list is output.	○	○
Screen Image		Set the image (ON/OFF) to be output to a screen image. When both are checked, both of ON and OFF screen images are output. When neither of them is checked, no screen image is output. In addition to a normal screen image, the screen image on which the object ID or devices are put can be output.	○	○
	Print Object ID	Outputs the screen image on which the object ID is put.	○	○
	Print Devices	Outputs the screen image on which devices are put.	○	○

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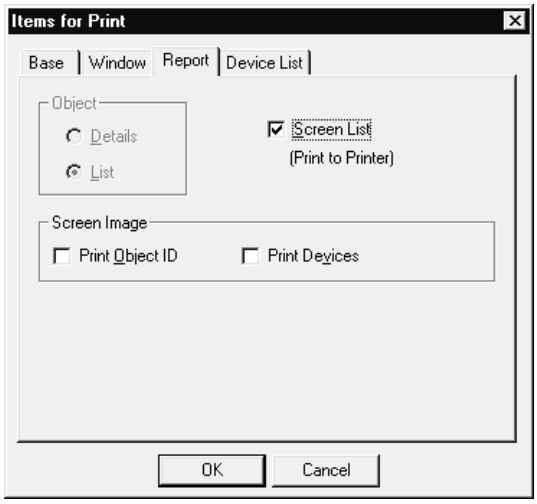
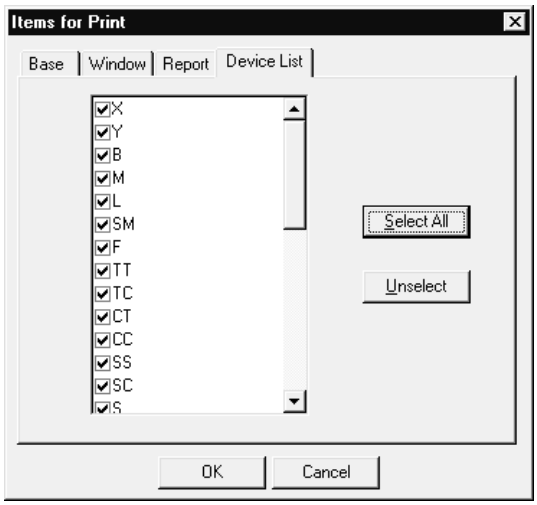
(2) Report tab



Item		Description	A	F
Object		Select the object setting to be output in [List] or [Details] format. Selectable only for output to file. (Fixed to [List] for output to printer.)	○	○
Screen List		Check this item to output a screen list. (ON image is output.)	○	○
Screen Image		Outputs a screen image. In addition to a normal screen image, the screen image on which the object ID or devices are put can be output.	○	○
	Print Object ID	Outputs the screen image on which the object ID is put.	○	○
	Print Devices	Outputs the screen image on which devices are put.	○	○

(3) Device tab



Item	Description	A	F
Device	Select a device name to be printed in a device list or device details.	○	○
Select All	Selects all devices.	○	○
Unselect	Unselects all devices.	○	○

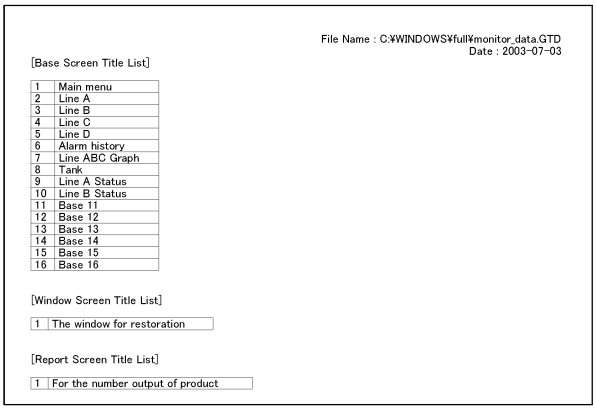
6 - 6

6.2 Printing example

6.2.1 Printer output

Title list

Each screen title is printed as shown below.



File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

[Base Screen Title List]

1	Main menu
2	Line A
3	Line B
4	Line C
5	Line D
6	Alarm history
7	Line ABC Graph
8	Tank
9	Line A Status
10	Line B Status
11	Base 11
12	Base 12
13	Base 13
14	Base 14
15	Base 15
16	Base 16

[Window Screen Title List]

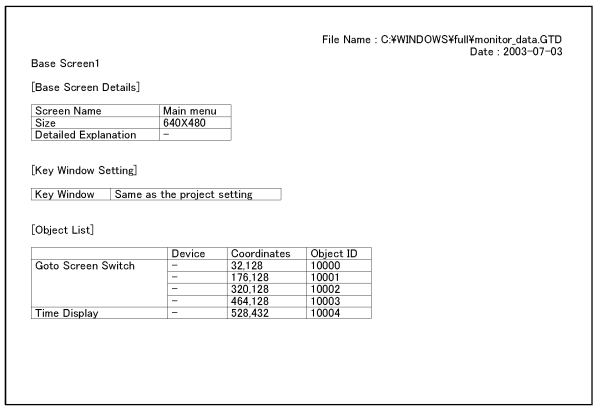
1	The window for restoration

[Report Screen Title List]

1	For the number output of product

Screen setting information

Setting items in each screen are printed as shown below.



File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

Base Screen1

[Base Screen Details]

Screen Name	Main menu
Size	640X480
Detailed Explanation	–

[Key Window Setting]

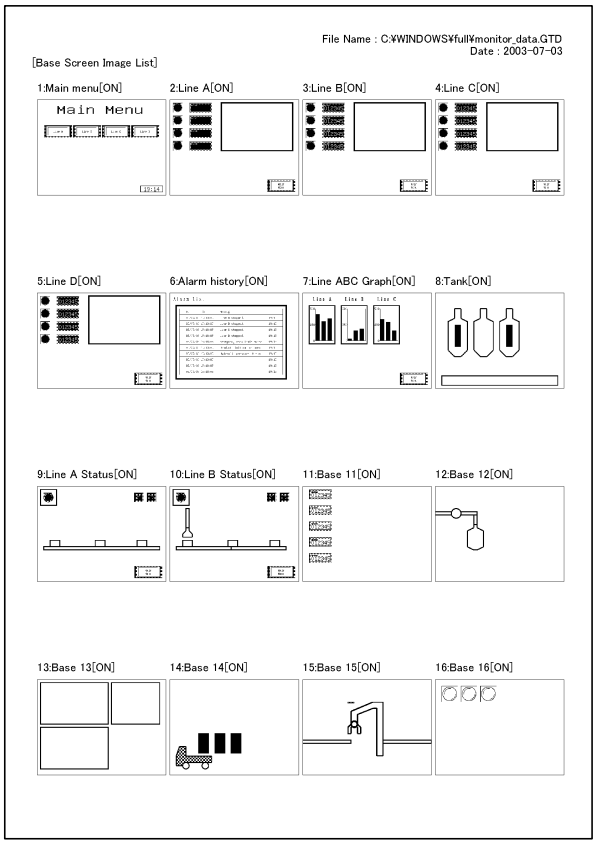
Key Window	Same as the project setting

[Object List]

	Device	Coordinates	Object ID
Goto Screen Switch	–	32,128	10000
	–	176,128	10001
	–	320,128	10002
	–	464,128	10003
Time Display	–	528,432	10004

Screen list

List of created screens is printed as shown below.



File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

[Base Screen Image List]

1:Main menu[ON] 2:Line A[ON] 3:Line B[ON] 4:Line C[ON]

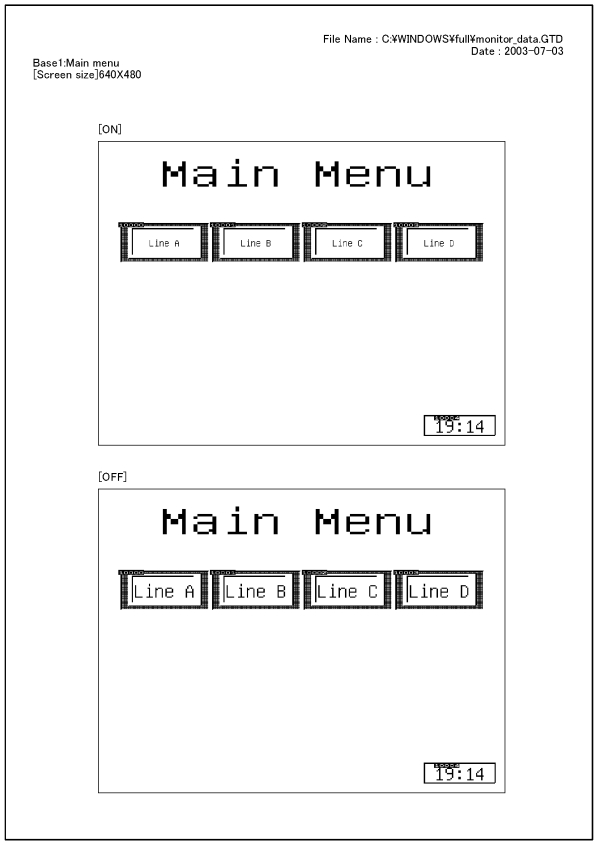
5:Line D[ON] 6:Alarm history[ON] 7:Line ABC Graph[ON] 8:Tank[ON]

9:Line A Status[ON] 10:Line B Status[ON] 11:Base 11[ON] 12:Base 12[ON]

13:Base 13[ON] 14:Base 14[ON] 15:Base 15[ON] 16:Base 16[ON]

Screen image

Each screen image is printed as shown below.



File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

Base1:Main menu
[Screen size]640X480

[ON]

Main Menu

Line A Line B Line C Line D

19:14

[OFF]

Main Menu

Line A Line B Line C Line D

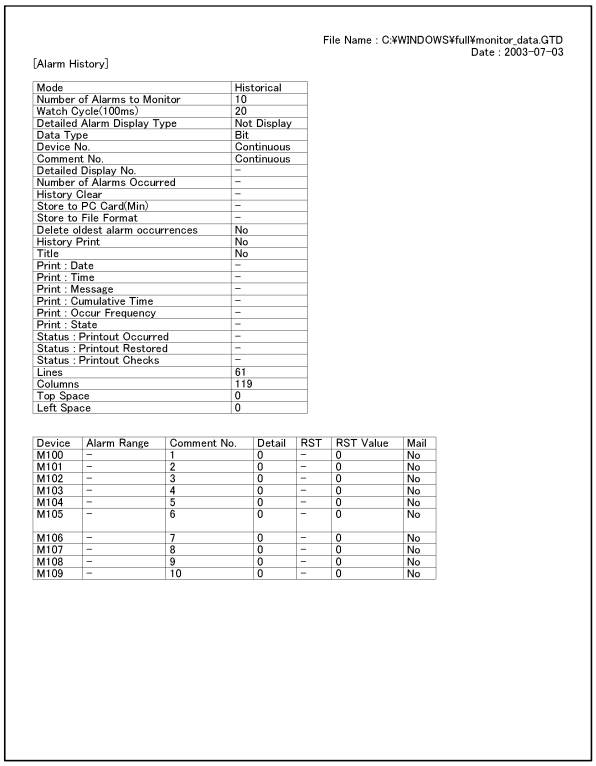
19:14

＊1 The number of screens displayed on the screen image view is fixed to 16 screens (4 x 4) per page.

6 - 7

Common Setting

Details of common setting are printed as shown below.



File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

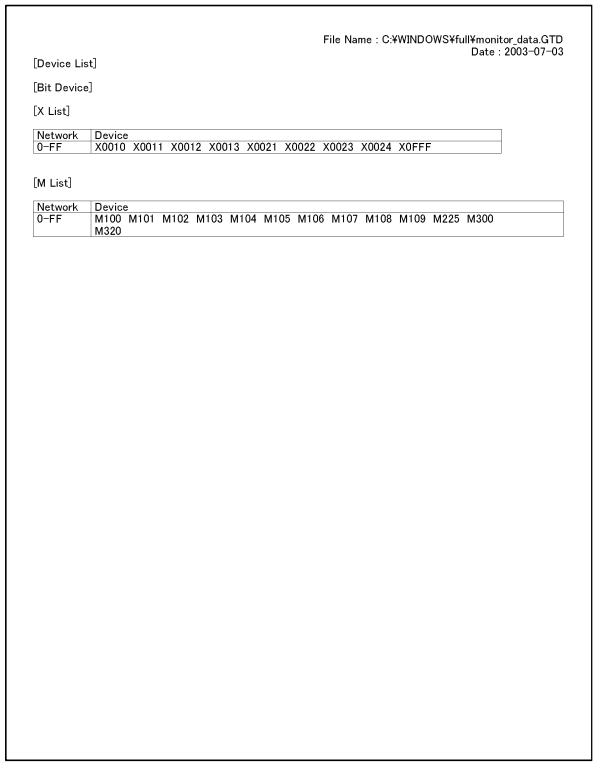
[Alarm History]

Mode	Historical
Number of Alarms to Monitor	10
Watch Cycle(100ms)	20
Detailed Alarm Display Type	Not Display
Data Type	Bit
Device No.	Continuous
Comment No.	Continuous
Detailed Display No.	–
Number of Alarms Occurred	–
History Clear	–
Store to PC Card(Min)	–
Store to File Format	–
Delete oldest alarm occurrences	No
History Print	No
Title	No
Print : Date	–
Print : Time	–
Print : Message	–
Print : Cumulative Time	–
Print : Occur Frequency	–
Print : State	–
Status : Printout Occurred	–
Status : Printout Restored	–
Status : Printout Checks	–
Lines	61
Columns	119
Top Space	0
Left Space	0

Device	Alarm Range	Comment No.	Detail	RST	RST Value	Mail
M100	–	1	0	–	0	No
M101	–	2	0	–	0	No
M102	–	3	0	–	0	No
M103	–	4	0	–	0	No
M104	–	5	0	–	0	No
M105	–	6	0	–	0	No
M106	–	7	0	–	0	No
M107	–	8	0	–	0	No
M108	–	9	0	–	0	No
M109	–	10	0	–	0	No

Device List

List of set devices is printed as shown below.



File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

[Device List]

[Bit Device]

[X List]

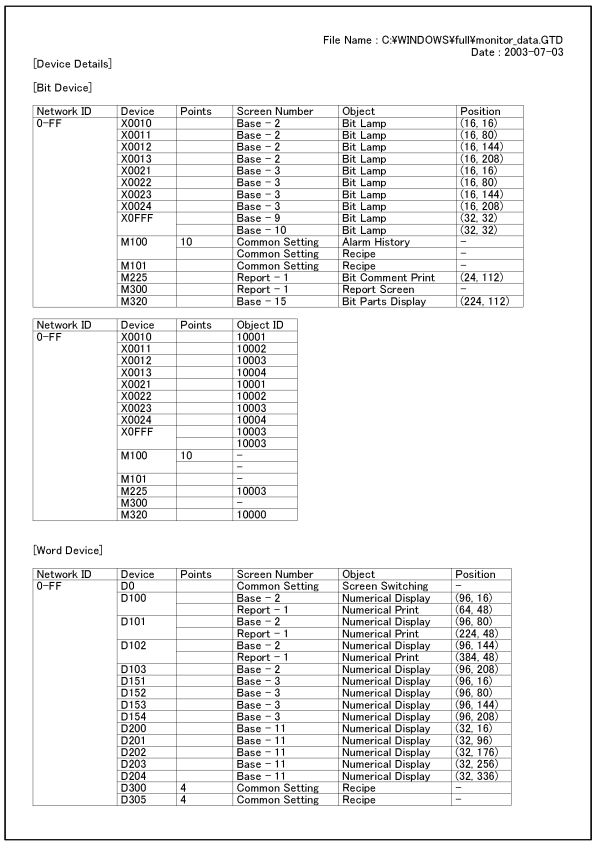
Network	Device
0-FF	X0010 X0011 X0012 X0013 X0021 X0022 X0023 X0024 X0FFF

[M List]

Network	Device
0-FF	M100 M101 M102 M103 M104 M105 M106 M107 M108 M109 M225 M300 M320

Device Details

Details of set devices are printed as shown below.



File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

[Device Details]

[Bit Device]

Network ID	Device	Points	Screen Number	Object	Position
0-FF	X0010		Base – 2	Bit Lamp	(16, 16)
	X0011		Base – 2	Bit Lamp	(16, 80)
	X0012		Base – 2	Bit Lamp	(16, 144)
	X0013		Base – 2	Bit Lamp	(16, 208)
	X0021		Base – 3	Bit Lamp	(16, 16)
	X0022		Base – 3	Bit Lamp	(16, 80)
	X0023		Base – 3	Bit Lamp	(16, 144)
	X0024		Base – 3	Bit Lamp	(16, 208)
	X0FFF		Base – 9	Bit Lamp	(32, 32)
			Base – 10	Bit Lamp	(32, 32)
	M100	10	Common Setting	Alarm History	–
			Common Setting	Recipe	–
	M101		Common Setting	Recipe	–
	M225		Report – 1	Bit Comment Print	(24, 112)
	M300		Report – 1	Report Screen	–
	M320		Base – 15	Bit Parts Display	(224, 112)

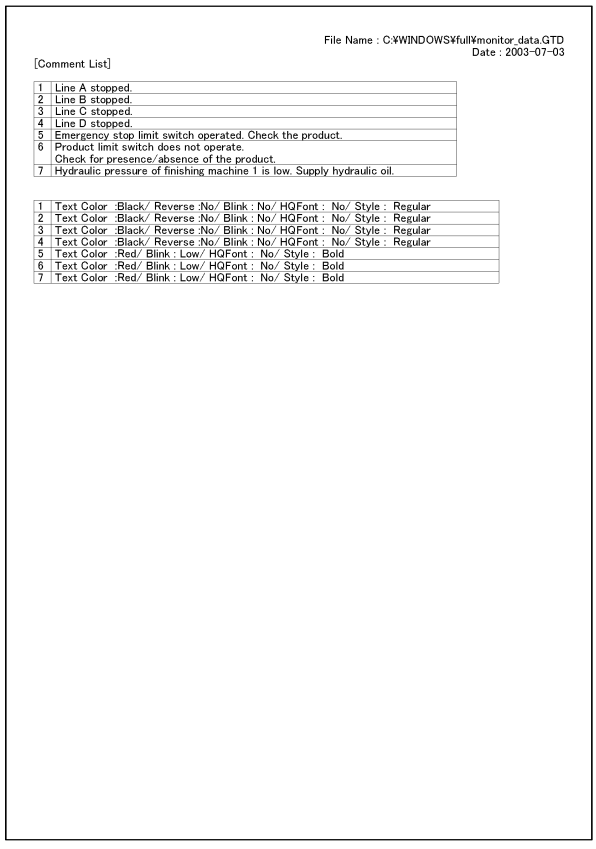
Network ID	Device	Points	Object ID
0-FF	X0010		10001
	X0011		10002
	X0012		10003
	X0013		10004
	X0021		10001
	X0022		10002
	X0023		10003
	X0024		10004
	X0FFF		10003
			10003
	M100	10	–
			–
	M101		–
	M225		10003
	M300		–
	M320		10000

[Word Device]

Network ID	Device	Points	Screen Number	Object	Position
0-FF	D0		Common Setting	Screen Switching	–
	D100		Base – 2	Numerical Display	(96, 16)
			Report – 1	Numerical Print	(64, 48)
	D101		Base – 2	Numerical Display	(96, 80)
			Report – 1	Numerical Print	(224, 48)
	D102		Base – 2	Numerical Display	(96, 144)
			Report – 1	Numerical Print	(384, 48)
	D103		Base – 2	Numerical Display	(96, 208)
	D151		Base – 3	Numerical Display	(96, 16)
	D152		Base – 3	Numerical Display	(96, 80)
	D153		Base – 3	Numerical Display	(96, 144)
	D154		Base – 3	Numerical Display	(96, 208)
	D200		Base – 11	Numerical Display	(32, 16)
	D201		Base – 11	Numerical Display	(32, 96)
	D202		Base – 11	Numerical Display	(32, 176)
	D203		Base – 11	Numerical Display	(32, 256)
	D204		Base – 11	Numerical Display	(32, 336)
	D300	4	Common Setting	Recipe	–
	D305	4	Common Setting	Recipe	–

Comment

Created comments and their attributes are printed as shown below.



File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

[Comment List]

1	Line A stopped.
2	Line B stopped.
3	Line C stopped.
4	Line D stopped.
5	Emergency stop limit switch operated. Check the product.
6	Product limit switch does not operate. Check for presence/absence of the product.
7	Hydraulic pressure of finishing machine 1 is low. Supply hydraulic oil.

1	Text Color :Black/ Reverse :No/ Blink : No/ HQFont : No/ Style : Regular
2	Text Color :Black/ Reverse :No/ Blink : No/ HQFont : No/ Style : Regular
3	Text Color :Black/ Reverse :No/ Blink : No/ HQFont : No/ Style : Regular
4	Text Color :Black/ Reverse :No/ Blink : No/ HQFont : No/ Style : Regular
5	Text Color :Red/ Blink : Low/ HQFont : No/ Style : Bold
6	Text Color :Red/ Blink : Low/ HQFont : No/ Style : Bold
7	Text Color :Red/ Blink : Low/ HQFont : No/ Style : Bold

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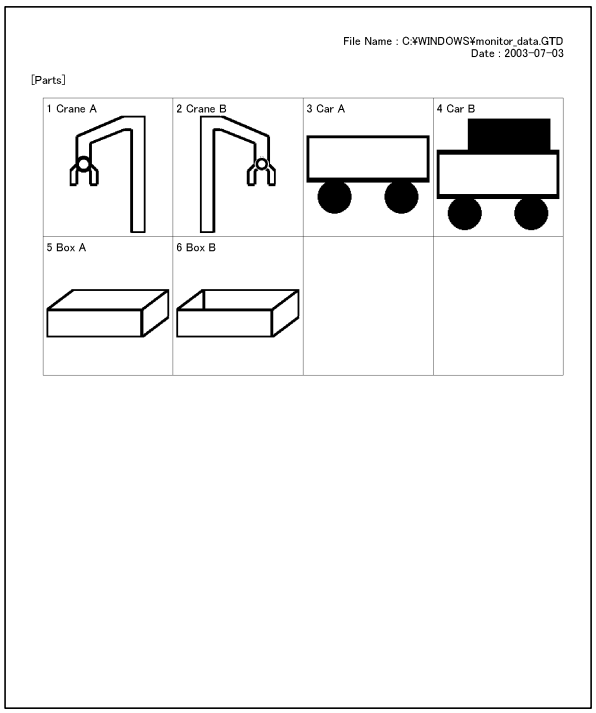
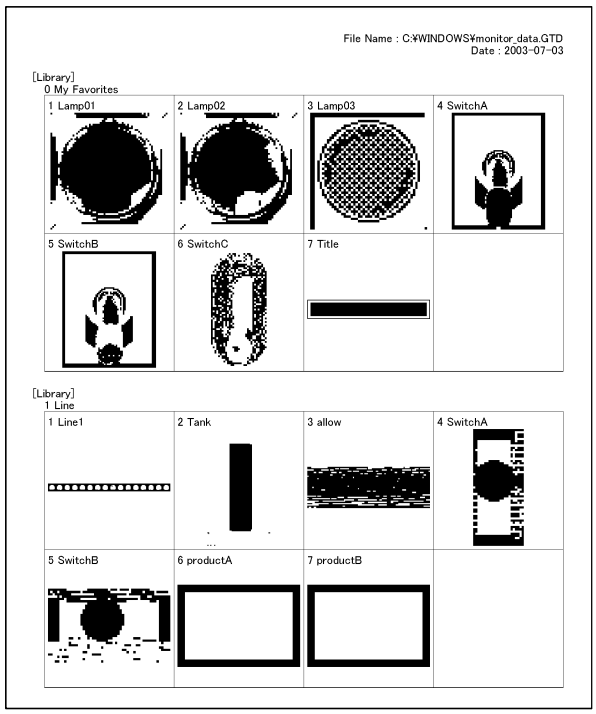
Parts

List of created parts is printed as shown below.



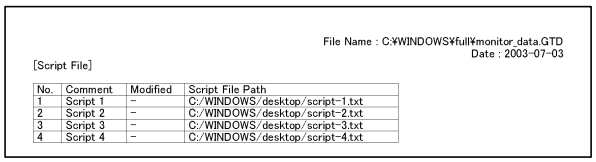
Library

List of My favorites or user-defined libraries is printed as shown below.



Script

List of set script files is printed as shown below.



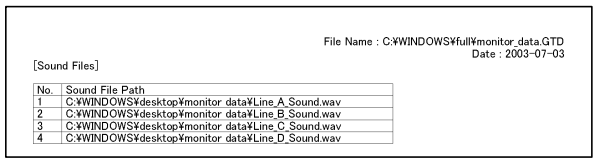
File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

[Script File]

No.	Comment	Modified	Script File Path
1	Script 1	-	C:/WINDOWS/desktop/script-1.txt
2	Script 2	-	C:/WINDOWS/desktop/script-2.txt
3	Script 3	-	C:/WINDOWS/desktop/script-3.txt
4	Script 4	-	C:/WINDOWS/desktop/script-4.txt

Voice

List of set voice files is printed as shown below.



File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

[Sound Files]

No.	Sound File Path
1	C:¥WINDOWS¥desktop¥monitor data¥Line_A_Sound.wav
2	C:¥WINDOWS¥desktop¥monitor data¥Line_B_Sound.wav
3	C:¥WINDOWS¥desktop¥monitor data¥Line_C_Sound.wav
4	C:¥WINDOWS¥desktop¥monitor data¥Line_D_Sound.wav

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Category

Each category list is printed as shown below.

File Name : C:¥WINDOWS¥full¥monitor_data.GTD
Date : 2003-07-03

[Category]

[Switch]

	Screen	Coordinates
Goto Screen Switch	B-3	480,400
Goto Screen Switch	B-4	480,400
Goto Screen Switch	B-5	480,400
Goto Screen Switch	B-7	480,400
Goto Screen Switch	B-9	480,400
Goto Screen Switch	B-1	32,128
Goto Screen Switch	B-1	176,128
Goto Screen Switch	B-1	320,128
Goto Screen Switch	B-1	464,128
Goto Screen Switch	B-10	480,400
Goto Screen Switch	B-2	480,400

[Lamp]

	Screen	Coordinates
Bit Lamp	B-3	16,16
Bit Lamp	B-3	16,80
Bit Lamp	B-3	16,144
Bit Lamp	B-3	16,208
Bit Lamp	B-4	16,16
Bit Lamp	B-4	16,80
Bit Lamp	B-4	16,144
Bit Lamp	B-4	16,208
Bit Lamp	B-5	16,16
Bit Lamp	B-5	16,80
Bit Lamp	B-5	16,144
Bit Lamp	B-5	16,208
Word Lamp	B-16	32,32
Word Lamp	B-16	128,32
Word Lamp	B-16	224,32
Bit Lamp	B-9	480,32
Bit Lamp	B-9	544,32
Bit Lamp	B-9	32,32
Bit Lamp	B-10	480,32
Bit Lamp	B-10	544,32
Bit Lamp	B-10	32,32
Bit Lamp	B-2	16,16
Bit Lamp	B-2	16,80
Bit Lamp	B-2	16,144
Bit Lamp	B-2	16,208

[Others]

	Screen	Coordinates
Numerical Display	B-11	32,16
Numerical Display	B-11	32,96
Numerical Display	B-11	32,176
Numerical Display	B-11	32,256
Numerical Display	B-11	32,336
Numerical Display	B-3	96,16
Numerical Display	B-3	96,80
Numerical Display	B-3	96,144
Numerical Display	B-3	96,208
Rectangle	B-3	256,16
Filled Circle	B-12	80,112
Filled Rectangle	B-12	0,128

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6.2.2 File output

1 Files to be output

In file output, the following files are output to the specified folder.

(1) Image file (＊＊ refers to screen numbers.)

(a) Base screen

Base ON-＊＊.Bmp	Base OFF-＊＊.Bmp
Base ON object ID-＊＊.Bmp	Base OFF object ID-＊＊.Bmp
Base ON device-＊＊.Bmp	Base OFF device-＊＊.Bmp

(b) Window screen

Window ON-＊＊.Bmp	Window OFF-＊＊.Bmp
Window ON object ID-＊＊.Bmp	Window OFF object ID-＊＊.Bmp
Window ON device-＊＊.Bmp	Window OFF device-＊＊.Bmp

(c) Report, Parts, Library

Report-＊＊.Bmp　　Parts-＊＊.Bmp

Library＊＊.-＊＊.Bmp (First ＊＊ shows the library No., and second one shows the template No., respectively)

(2) Text file

Title list.CSV/TXT	Screen setting information.CSV/TXT
Common setting.CSV/TXT	Device list.CSV/TXT
Device detail.CSV/TXT	Comment list.CSV/TXT
Parts.CSV/TXT	Library.CSV/TXT
Script.CSV/TXT	Voice.CSV/TXT
Category.CSV/TXT	

Remark

(1) If a file, which was saved in CSV format once by GT Designer2, is opened by other software, this may change the format settings, and the file may not be correctly displayed.
In this case, adjust the settings by using the corresponding menu or other of the software.

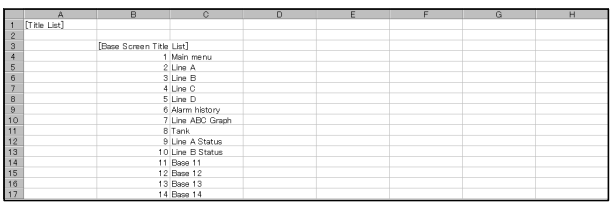
(2) If a file, which was saved in TXT format once by GT Designer2, is opened by other software, this may disrupt the settings of tab or space, and the text may appear misaligned.
In this case, adjust the text poison by adding/deleting tabs or spaces.

2 Output image (When set to CSV file format)

The output image (in CSV file format) is shown below:

Title list

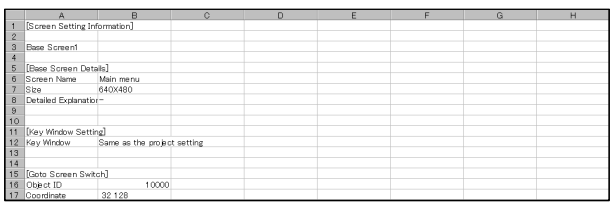
Each screen title is output as shown below.



	A	B	C	D	E	F	G	H
1	[Title List]							
2								
3		[Base Screen Title List]						
4			1	Main menu				
5			2	Line A				
6			3	Line B				
7			4	Line C				
8			5	Line D				
9			6	Alarm history				
10			7	Line ABC Graph				
11			8	Tank				
12			9	Line A Status				
13			10	Line B Status				
14			11	Base 11				
15			12	Base 12				
16			13	Base 13				
17			14	Base 14				

Screen setting information

Setting items in each screen are output as shown below.



	A	B	C	D	E	F	G	H
1	[Screen Setting Information]							
2								
3	Base Screen1							
4								
5	[Base Screen Details]							
6	Screen Name	Main menu						
7	Size	640X480						
8	Detailed Explanation							
9								
10								
11	[Key Window Setting]							
12	Key Window	Same as the project setting						
13								
14								
15	[Goto Screen Switch]							
16	Object ID	10000						
17	Coordinate	32 128						

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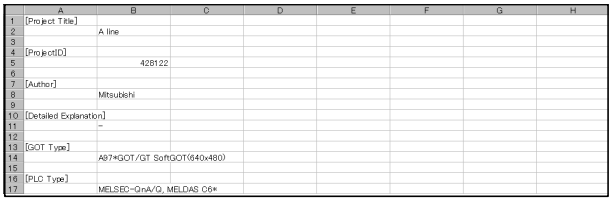
Common Setting

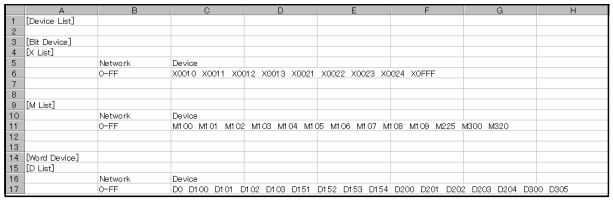
Details of common setting are output as shown below.



	A	B	C	D	E	F	G	H
1	[Project Title]							
2		A line						
3								
4	[Project ID]							
5		428122						
6								
7	[Author]							
8		Mitsubishi						
9								
10	[Detailed Explanation]							
11		-						
12								
13	[GOT Type]							
14		A97*GOT/GT SoftGOT(640x480)						
15								
16	[PLC Type]							
17		MELSEC-QnA/Q, MELDAS C6*						

Device List

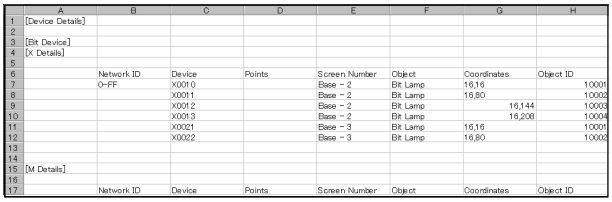
List of set devices is output as shown below.



	A	B	C	D	E	F	G	H
1	[Device List]							
2								
3	[Bit Device]							
4	[X List]							
5		Network	Device					
6		0-FF	X0010 X0011 X0012 X0013 X0021 X0022 X0023 X0024 X0FFF					
7								
8								
9	[M List]							
10		Network	Device					
11		0-FF	M100 M101 M102 M103 M104 M105 M106 M107 M108 M109 M225 M300 M320					
12								
13								
14	[Word Device]							
15	[D List]							
16		Network	Device					
17		0-FF	D0 D100 D101 D102 D103 D151 D152 D153 D154 D200 D201 D202 D203 D204 D300 D305					

Device Details

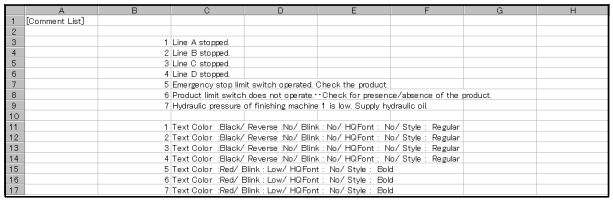
Details of set devices are output as shown below.



	A	B	C	D	E	F	G	H
1	[Device Details]							
2								
3	[Bit Device]							
4	[X Details]							
5								
6		Network ID	Device	Points	Screen Number	Object	Coordinates	Object ID
7		0-FF	X0010		Base - 2	Bit Lamp	16,16	10001
8			X0011		Base - 2	Bit Lamp	16,80	10002
9			X0012		Base - 2	Bit Lamp	16,144	10003
10			X0013		Base - 2	Bit Lamp	16,208	10004
11			X0021		Base - 3	Bit Lamp	16,16	10001
12			X0022		Base - 3	Bit Lamp	16,80	10002
13								
14								
15	[M Details]							
16								
17		Network ID	Device	Points	Screen Number	Object	Coordinates	Object ID

Comment

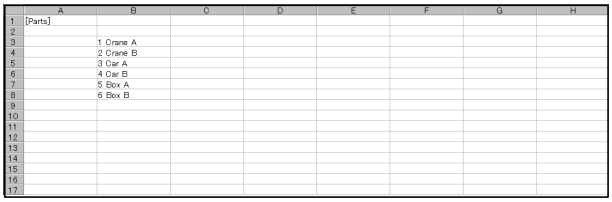
Created comments and their attributes are output as shown below.



	A	B	C	D	E	F	G	H
1	[Comment List]							
2								
3			1 Line A stopped.					
4			2 Line B stopped.					
5			3 Line C stopped.					
6			4 Line D stopped.					
7			5 Emergency stop limit switch operated. Check the product.					
8			6 Product limit switch does not operate.-Check for presence/absence of the product.					
9			7 Hydraulic pressure of finishing machine 1 is low. Supply hydraulic oil.					
10								
11			1 Text Color : Black/ Reverse :No/ Blink : No/ HQFont : No/ Style : Regular					
12			2 Text Color : Black/ Reverse :No/ Blink : No/ HQFont : No/ Style : Regular					
13			3 Text Color : Black/ Reverse :No/ Blink : No/ HQFont : No/ Style : Regular					
14			4 Text Color : Black/ Reverse :No/ Blink : No/ HQFont : No/ Style : Regular					
15			5 Text Color : Red/ Blink : Low/ HQFont : No/ Style : Bold					
16			6 Text Color : Red/ Blink : Low/ HQFont : No/ Style : Bold					
17			7 Text Color : Red/ Blink : Low/ HQFont : No/ Style : Bold					

Parts

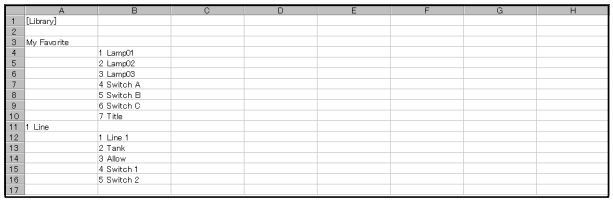
List of registered parts is output as shown below.



	A	B	C	D	E	F	G	H
1	[Parts]							
2								
3		1 Crane A						
4		2 Crane B						
5		3 Car A						
6		4 Car B						
7		5 Box A						
8		6 Box B						
9								
10								
11								
12								
13								
14								
15								
16								
17								

Library

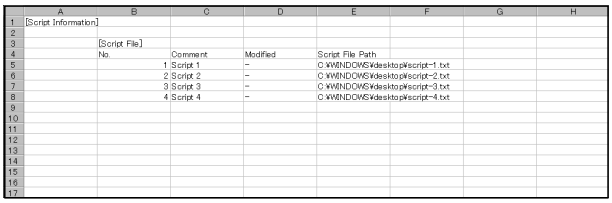
List of registered libraries is output as shown below.



	A	B	C	D	E	F	G	H
1	[Library]							
2								
3	My Favorite							
4		1 Lamp01						
5		2 Lamp02						
6		3 Lamp03						
7		4 Switch A						
8		5 Switch B						
9		6 Switch C						
10		7 Title						
11	1 Line							
12		1 Line 1						
13		2 Tank						
14		3 Allow						
15		4 Switch 1						
16		5 Switch 2						
17								

Script

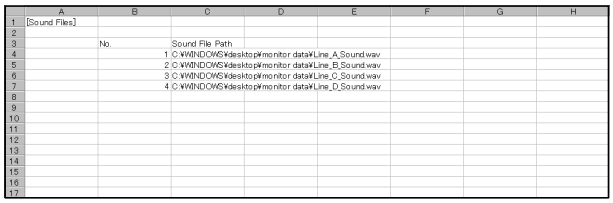
List of script files is output as shown below.



	A	B	C	D	E	F	G	H
1	[Script Information]							
2								
3		[Script File]						
4		No.	Comment	Modified	Script File Path			
5			1 Script 1	-	C:¥WINDOWS¥desktop¥script-1.txt			
6			2 Script 2	-	C:¥WINDOWS¥desktop¥script-2.txt			
7			3 Script 3	-	C:¥WINDOWS¥desktop¥script-3.txt			
8			4 Script 4	-	C:¥WINDOWS¥desktop¥script-4.txt			
9								
10								
11								
12								
13								
14								
15								
16								
17								

Voice

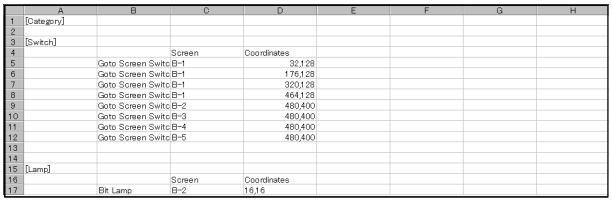
List of registered voice files is output as shown below.



	A	B	C	D	E	F	G	H
1	[Sound Files]							
2								
3		No.	Sound File Path					
4			1 C:¥WINDOWS¥desktop¥monitor data¥Line_A_Sound.wav					
5			2 C:¥WINDOWS¥desktop¥monitor data¥Line_B_Sound.wav					
6			3 C:¥WINDOWS¥desktop¥monitor data¥Line_C_Sound.wav					
7			4 C:¥WINDOWS¥desktop¥monitor data¥Line_D_Sound.wav					
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								

Category

Each category list is output as shown below.



	A	B	C	D	E	F	G	H
1	[Category]							
2								
3	[Switch]							
4			Screen	Coordinates				
5		Goto Screen Switch	B-1	32,128				
6		Goto Screen Switch	B-1	176,128				
7		Goto Screen Switch	B-1	320,128				
8		Goto Screen Switch	B-1	464,128				
9		Goto Screen Switch	B-2	480,400				
10		Goto Screen Switch	B-3	480,400				
11		Goto Screen Switch	B-4	480,400				
12		Goto Screen Switch	B-5	480,400				
13								
14								
15	[Lamp]							
16			Screen	Coordinates				
17		Bit Lamp	B-2	16,16				

6 - 12

7. USING LIBRARY

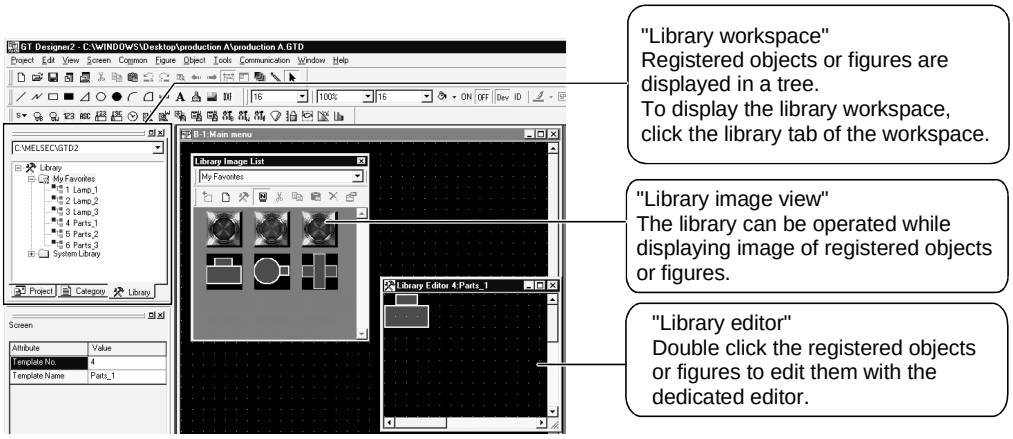
Figures and objects created by the user can be registered as a library.
Registered figures and objects can be easily pasted on the screen.

7.1 What is Library?

7.1.1 What you need to know before using library

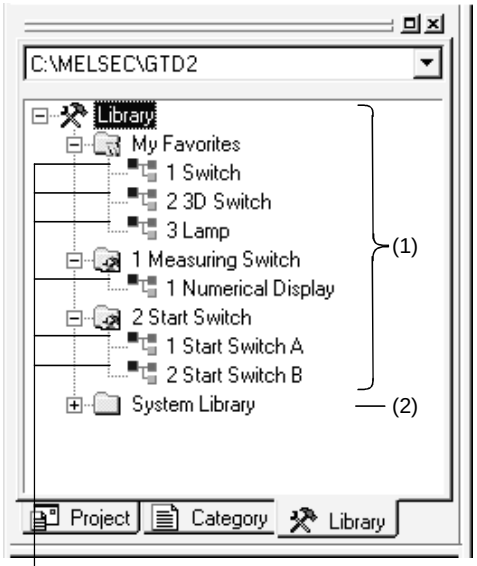
1 Screen used for library

In library, registration and readout are performed on the screen below:


"Library workspace"
Registered objects or figures are displayed in a tree.
To display the library workspace, click the library tab of the workspace.
"Library image view"
The library can be operated while displaying image of registered objects or figures.
"Library editor"
Double click the registered objects or figures to edit them with the dedicated editor.

7 - 1

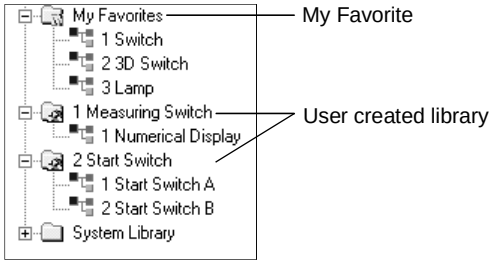
2 Library type



Template
Figures and objects registered to the library are registered as templates.
Templates are registered under any of libraries.

(1) User created library

Objects or figures created by a user can be registered.



(a) My Favorite

Objects or figures registered as "My favorite" are registered on the "My Favorite" toolbars.
When frequently used objects/figures are registered on My Favorite toolbars, it is convenient to use them.

(b) User created library

It is a library to register user created figures/objects.
When folders are classified for each type, it is convenient to use them.

User-created objects or figures are registered.

(2) System library

The library (not changed by a user) provided by the GT Designer2 has been registered.
Retrieving a preset template and arrange it on the screen facilitates settings of lamps or switches.
Libraries/templates in the system library cannot be registered, deleted or changed for their attributes.

3 Number of templates that can be registered

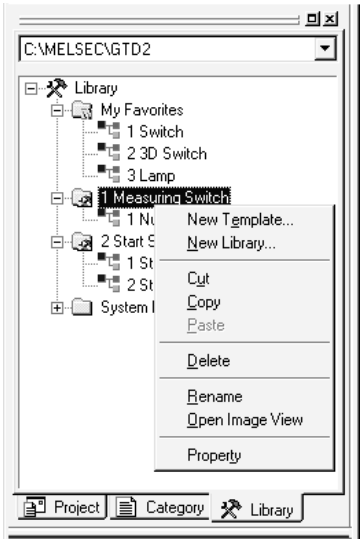
The maximum number of user created libraries is 50. For one library, the maximum 200 templates can be registered.

7 - 2

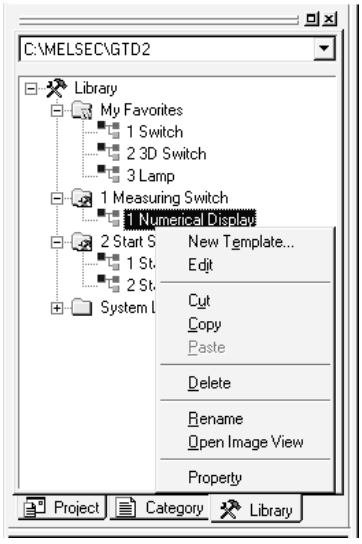
7.1.2 Basic operation of library

1 Basic operation of library workspace

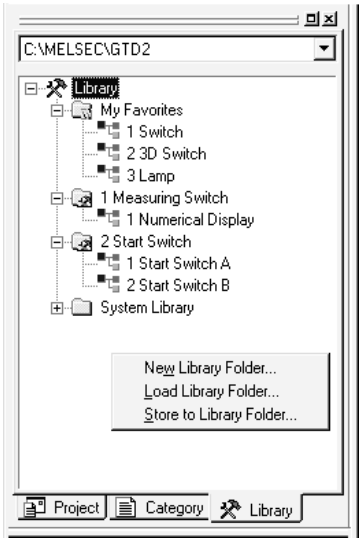
Select the item for operation and right click the mouse to select the setting item.
As shown below, the display varies depending on the selected items.



Right click the mouse when the library is selected.



Right click the mouse when the template is selected.

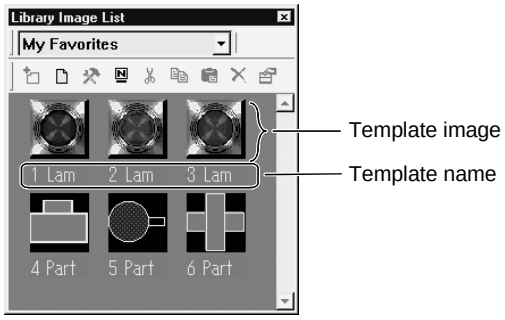


Right click the mouse at a space.

Item	Description	A	F
New Template	New template is added to My Favorite or the user created library.	○	○
New Library	New library is added to the user created library.	○	○
Edit	Registered template is edited/modified with the library editor.	○	○
Cut	Registered library/template is cut.	○	○
Copy	Registered library/template is copied.	○	○
Paste	Cut and registered library/template is pasted to the new library/template.	○	○
Delete	Registered library/template is deleted.	○	○
Rename	The name of the registered library/template is changed.	○	○
Open Image View	Template image is displayed on the [Library image list] screen.	○	○
Property	The "number" and "name" of the registered library/template is changed.	○	○
New Library Folder	A folder to save the library data (My Favorite, user created library) is newly created.	○	○
Load Library Folder	The library data (My Favorite, user created library) is loaded.	○	○
Store to Library Folder	The currently edited library data (My Favorite, user created library) is saved.	○	○

2 Basic operation of library image list dialog box

Select the [View] → [Library] → [My Favorite]/[User Defined Libraries]/[System Libraries] menu.
The library image list appears.



Item	Description	A	F
Library type selection menu	The library type to be displayed is changed.	○	○
(Register)	Objects or figures selected on the drawing screen are registered on the library.	○	○
(New Screen)	Template is newly created.	○	○
(Edit)	Registered template is edited with the library editor.	○	○
(Name)	Template name is displayed/not displayed.	○	○
(Cut)	Selected template is cut.	○	○
(Copy)	Selected template is copied.	○	○
(Paste)	Template copied with the Copy button is pasted.	○	○
(Delete)	Selected template is deleted.	○	○
(Property)	Property of a template is displayed.	○	○

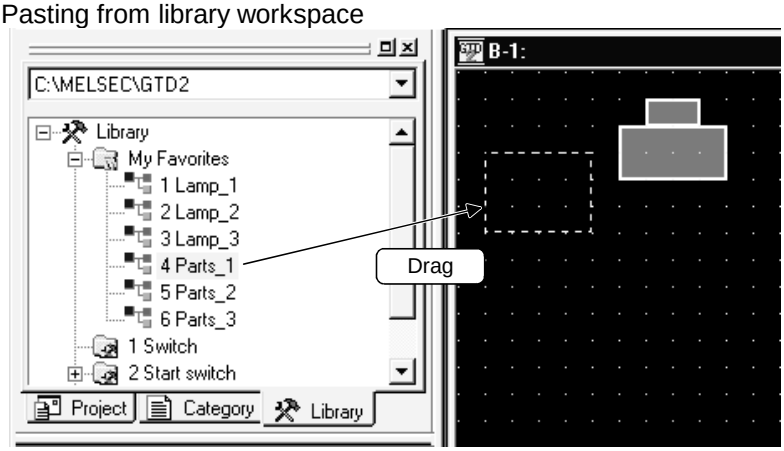
7 - 4

7.2 Pasting Objects or Figures from Library

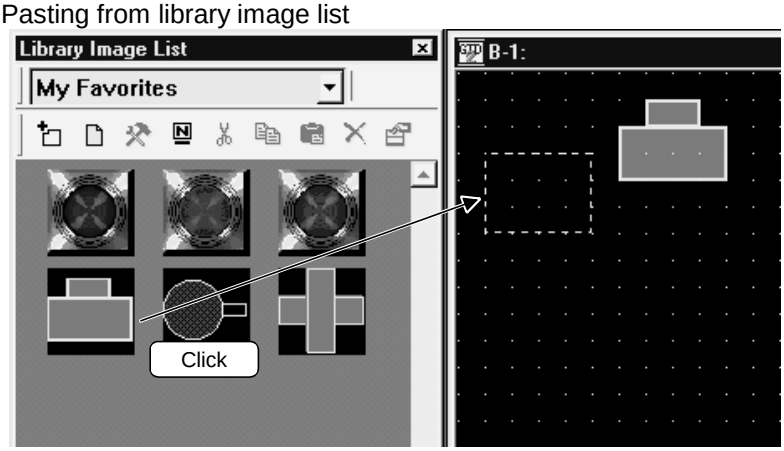
Objects or figures registered to the library are pasted on the screen.

1 Select the template for pasting and paste it on the drawing screen.

(1) Pasting from library workspace

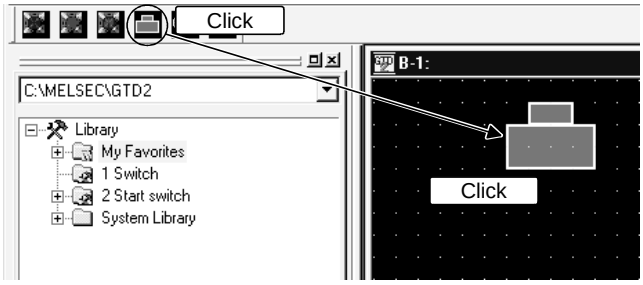


(2) Pasting from library image list



Hint! Loading My Favorite library

Objects or figures registered to the My Favorite library can be read out from the My Favorite icon on the toolbar.



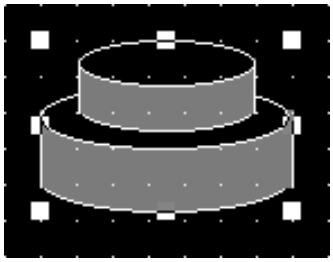
7 - 5

7.3 Creating Original Library

7.3.1 Registering objects or figures on library

Objects or figures are registered to My Favorite or the user created library.

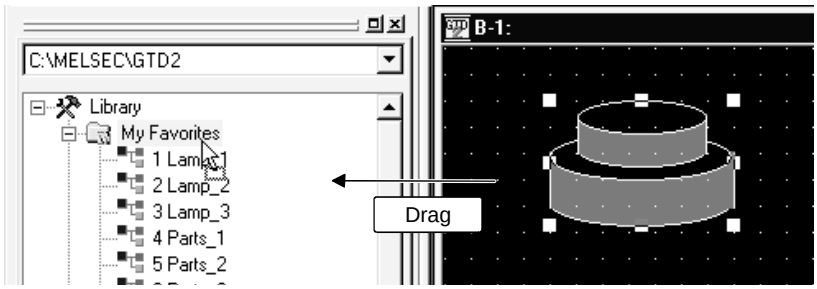
1 Select the object/figure for registration.



2 Perform the following operation:

(1) Using library workspace

Drag the object or figure into the workspace.

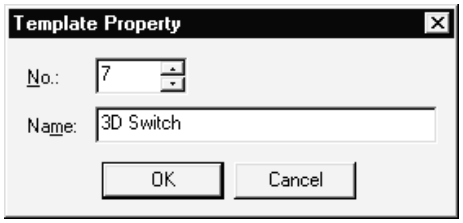


(2) Using library image list

Click the (Register) button.

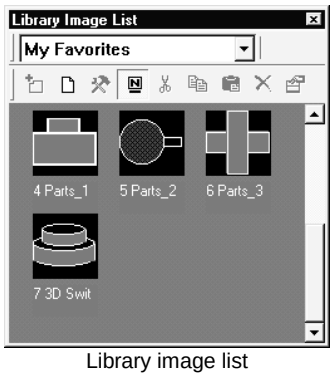
3 The template property dialog box appears.

Input the template number and name and click the OK button.



4 Registration is completed.

Library workspace



Library image list

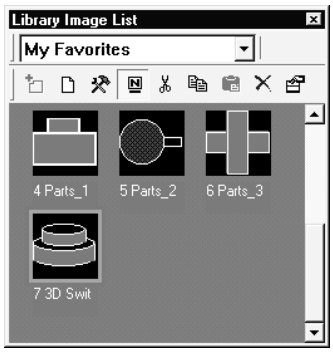
7 - 6

7.3.2 Copying registered library/template

User created library or registered template is copied.

1 Select the user created library/template for copying.

Library workspace



Library image list

2 Perform the following operation:

(1) Copying in library workspace

Right click the mouse to select [Copy].

Right click the mouse again to select [Paste].

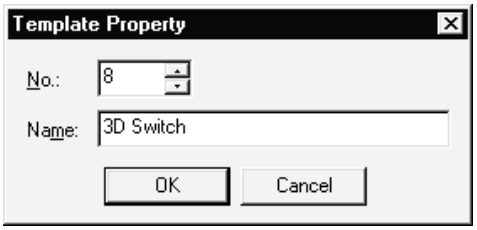
(2) Copying in library image list

Click (Copy).

Then, click (Paste).

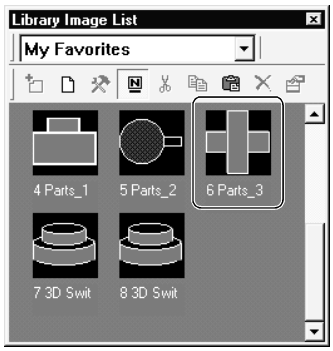
3 The library property/template property dialog box appears.

Set the user created library/template number of copy destination and the library/template name. Click the OK button.



4 The selected user created library/template is copied.

Library workspace



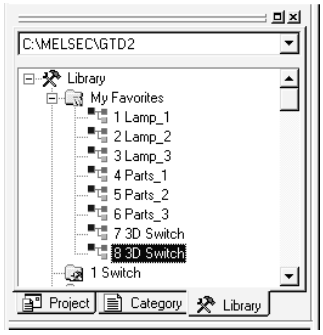
Library image list

7 - 7

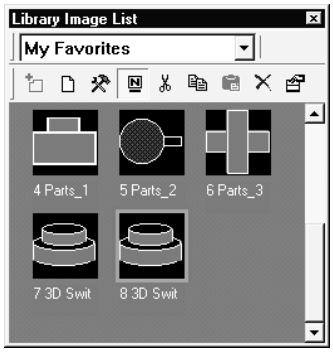
7.3.3 Deleting registered library/template

User created library or registered template is deleted.

1 Select the user created library/template for deletion.



Library workspace



Library image list

2 Perform the operations below:

(1) Deleting in library workspace

Right click the mouse to select the [Delete] menu.

(2) Deleting in library image list

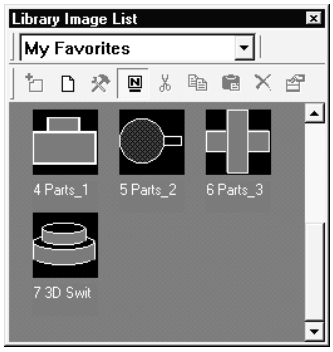
Click the (Delete) button.

3 The confirm screen delete/confirm template delete dialog box appears.

Click the Yes button.

4 The selected user created library/template is deleted.

Library workspace



Library image list

Point Deleting user created library

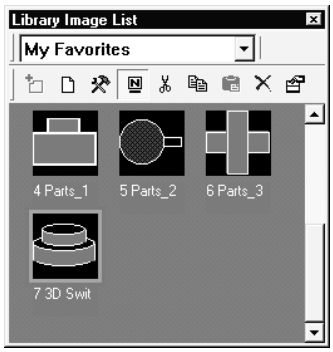
When the user created library is deleted, note that all templates registered on the library are deleted.

7.3.4 Editing registered objects and figures

Objects and figures registered to My Favorite or the user created library are edited.

1 Select the template for editing.

Library workspace



Library image list

2 Perform the operations below:

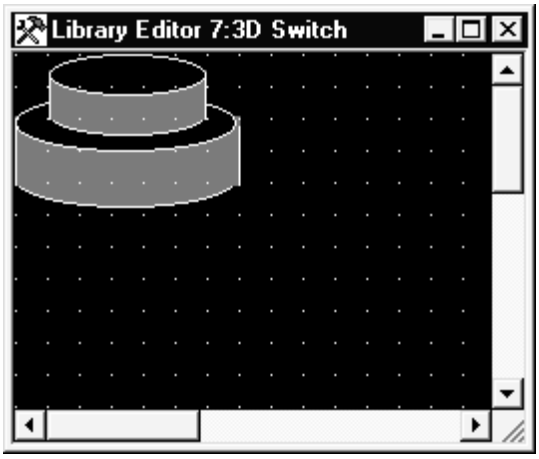
(1) Editing in library workspace

Right click the mouse to select the [Edit] menu.
(The template can be edited by double clicking.)

(2) Deleting in library image list

Click the (Library Edit) button.
(The template can be edited by double clicking.)

3 The library editor screen appears. Edit the template.



4 After editing the template, close the screen. (Click the button on the upper right of the screen.)

If you want to cancel the edited reslt on the library editor screen, cancel the edition operation before closing the library editor screen.

Section 8.2.4 Undo, Repeat/Redo

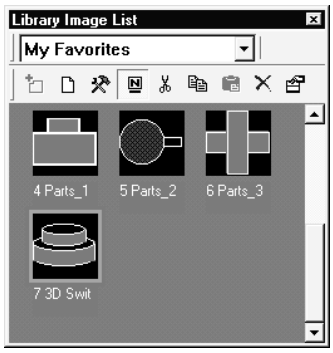
7 - 9

7.3.5 Changing library property

Number or name of user created library or registered template is changed.

1 Select the user created library/template for copying.

Library workspace



Library image list

2 Perform the following operation:

(1) Editing in library workspace

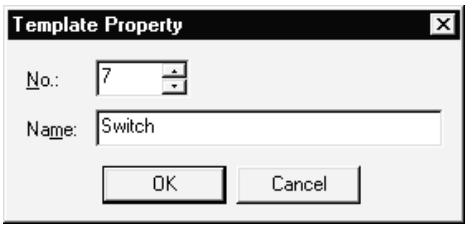
Right click the mouse to select [Property].

(2) Deleting in library image list

Click the (Property) button.

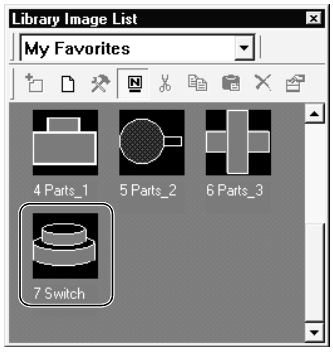
3 The template creation dialog box appears.

Change the library/template number and the library/template name. Click the OK button.



4 Property of the selected user created library/template is changed.

Library workspace



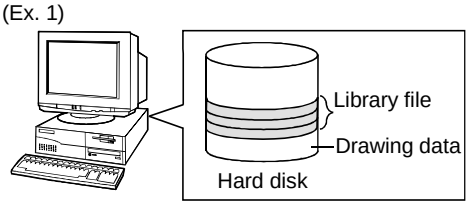
Library image list

7 - 10

7.3.6 Saving library to file

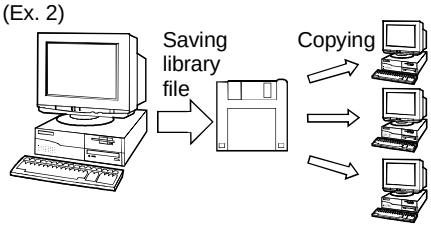
My Favorite/user created library file can be saved separately from the currently edited library file.
To use the multiple libraries for different drawing purposes, save the files in the PC hard disk. (☞ Section 7.3.7 Loading library from file)
In addition, by saving the file in a floppy disk, the library can be shared with multiple PCs.

(Ex. 1)



Multiple library files are saved in the PC hard disk.

(Ex. 2)



A created library is shared with multiple PCs.

Point Creating GOT-A900 series screen and GOT-F900 series screen

Make sure to create the library for GOT-A900 series screen and GOT-F900 series screen separately.
If the same library is used for both of them, the settings may be changed when the library is overwritten.

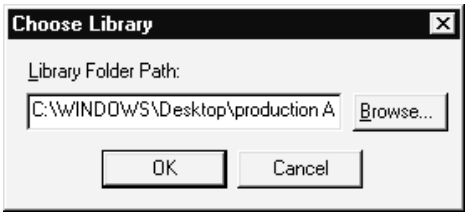
1 Saving created library

Save the created library according to the following procedure.

1. Select and right-click [Library] and then click [Store to Library Folder].

2. As the Choose library dialog box appears, specify the folder to store the library file.

The library file name is unchangeable. When saving multiple libraries, create a folder for each library file.
After the specification, click the [OK] button.



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3 The library file (GTD2.lbd) is stored in the specified folder.

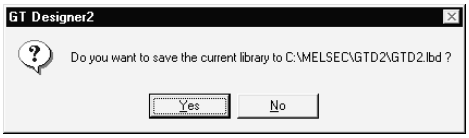
7 - 12

2 Creating a new library irrespective of the one already created.

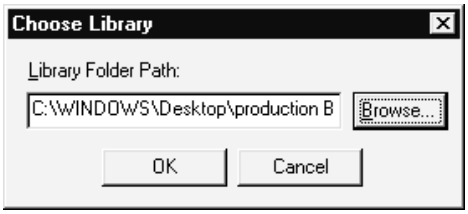
Create a new library irrespective of the one already created, according to the following procedure.

1 Select and right-click [Library] and then click [New Library Folder].

2 The dialog box appears asking whether the currently edited library data is saved or not.
When saving the library, click the Yes button.



3 Specify the folder to store the library file.
The library file name is unchangeable. When saving multiple libraries, create a folder for each library file.
After the specification, click the OK button.



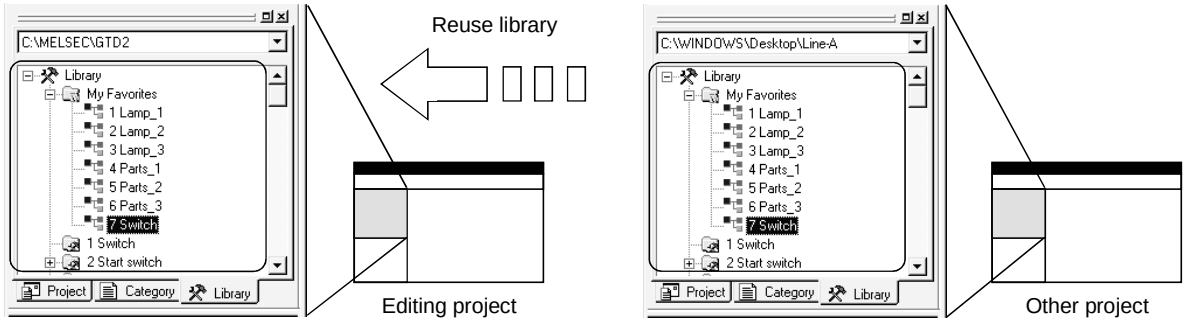
4 The library file (GTD2.lbd) is stored in the specified folder.

7 - 13

7.3.7 Loading library from file

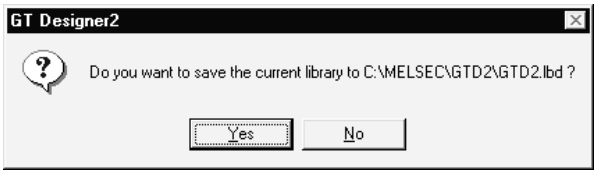
The specified library file can be read out to change the data of My Favorite and the user created library. A library file created by other PC can be loaded into the library of the editing project.

(Ex.) Library data of other project are loaded into the editing project.

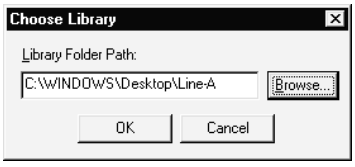


1 Right click the mouse at a blank space in the library workspace and click [Load Library Folder].

2 The dialog box to confirm if the currently editing library data are saved or not appears. Click the Yes or No button.



3 The choose library dialog box appears.
Specify the folder of the library file to be loaded and click the OK button.

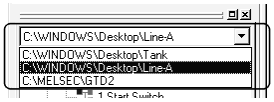


7 - 14

4 Data in My Favorite and the user created library are changed to the library data of the library file in the specified folder.

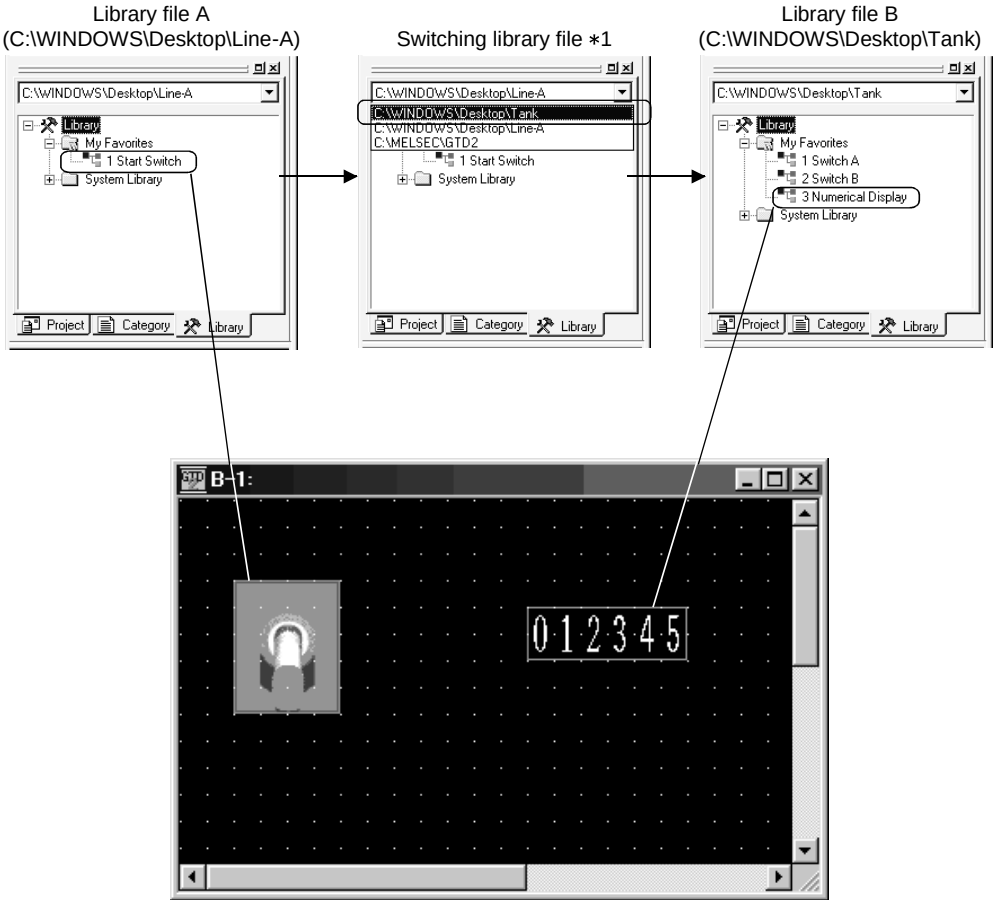
Hint! Loading multiple library files to create project

Alternate loading of multiple library files facilitates use of multiple library files with one project.



The storange location of the loaded library file is displayed on the list box at the upper part of the library workspace. Multiple library files can be easily loaded.

Ex.) After using the switch of library file A, use the numerical display of library file B.

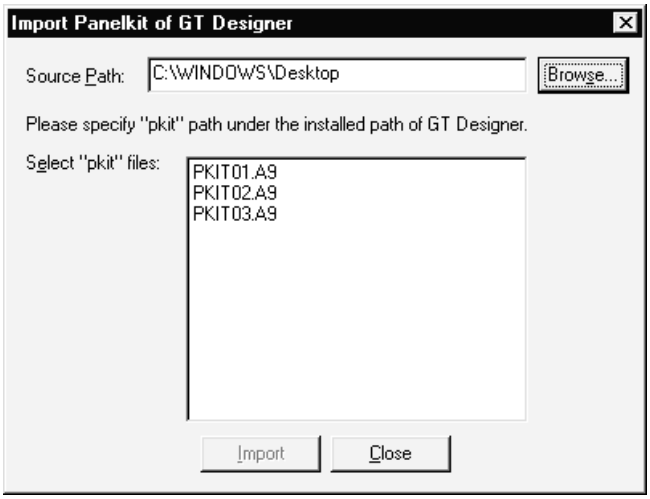


7 - 15

7.4 Utilizing Panelkit of GT Designer

The panelkit of the GT Designer can be imported and used on the GT Desinger2.

1. Select the [Project] → [Import Panelkit of GT Designer] menu.
2. The Import Panelkit of GT Designer dialog box appears. Refer to the following descriptions for setting:



Item	Description	A	F
Source Path	Storage location of the panelkit of the GT Designer is specified.	○	×
Select "pkit" files	Panelkit files in the [Source path] are displayed. The selected panelkit file is imported to the GT Desinger2.	○	×

3. Click the Import button to import the panelkit.

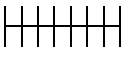
7 - 16

8. DRAW AND EDIT

8.1 Drawing Figures

8.1.1 Drawing figures

1 Draw each type of figure as follows:

Figure	Drawing example	Operation	A	F
Line		• (Line) • [Figure] → [Line] menu	○	○
Line FreeForm		• (Line FreeForm) • [Figure] → [Line FreeForm] menu	○	×
Rectangle	 	• (Rectangle) • [Figure] → [Rectangle] menu • (Rectangle (Filled)) • [Figure] → [Rectangle] (Filled) menu	○	○
Polygon		• (Polygon) • [Figure] → [Polygon] menu	○	×
Circle (including ellipses (GOT-A900 Series only))	 	• (Circle) • [Figure] → [Circle] menu • (Circle (Filled)) • [Figure] → [Circle (Filled)] menu	○	○
Arc (including elliptic arc)		• (Arc) • [Figure] → [Arc] menu	○	×
Sector		• (Sector) • [Figure] → [Sector] form	○	×
Scale		• (Scale) • [Figure] → [Scale] menu	○	×

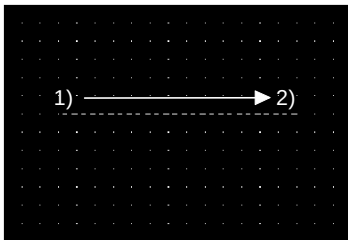
8

8 - 1

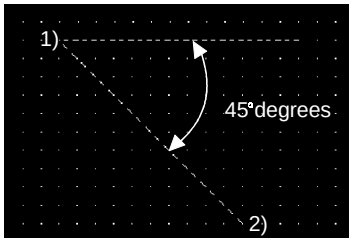
2 Drawing figures

(1) Line

Drag from start point 1) to end point 2), and release the left button of the mouse.

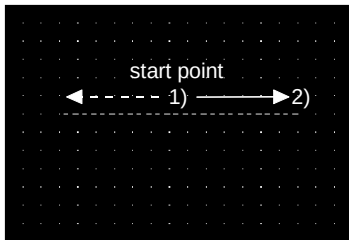


Draw while pressing the Shift key.



Lines can be drawn at the angle of 45 degrees.

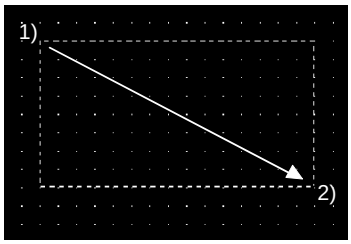
Draw while pressing the Ctrl key.



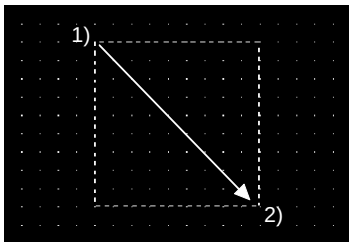
A line can be drawn from the start point as a center.

(2) Rectangle

Drag from start point 1) to end point 2), and release the left button of the mouse.

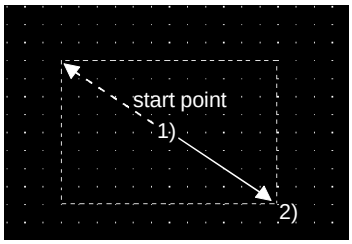


Draw while pressing the Shift key.



A square can be drawn.

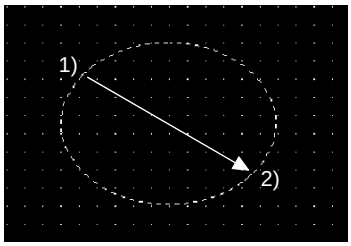
Draw while pressing the Ctrl key.



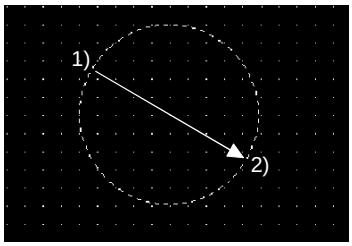
A rectangle can be drawn from the start point as a center.

(3) Circle

Drag from start point 1) to end point 2), and release the left button of the mouse.

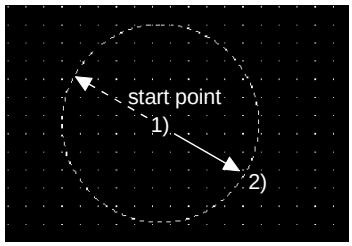


Draw while pressing the Shift key.



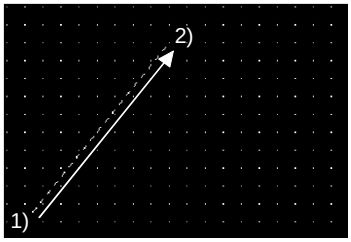
A complete round circle can be drawn.

Draw while pressing the Ctrl key.



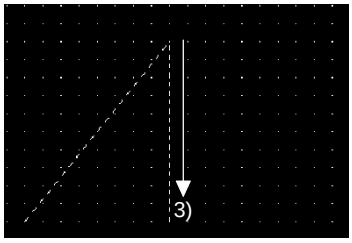
A circle can be drawn from the start point as a center.

(4) Line free form



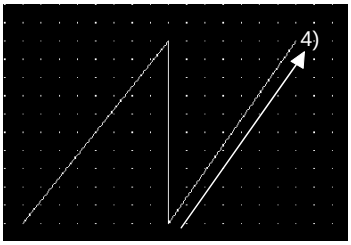
Drag from start point 1) to end point 2) of the first line, and release the left button of the mouse.

→



Click at the end point of next line 3).

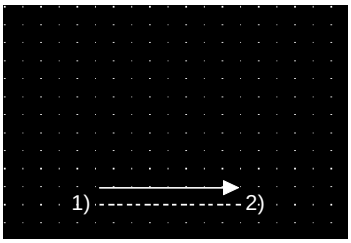
→



Repeat the operation in 3) until a figure is drawn. Double click end point 4) to complete drawing.

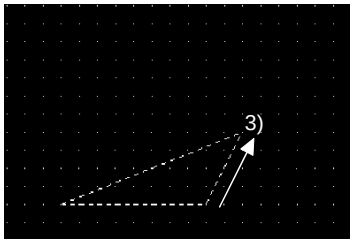
8 - 2

(5) Polygon



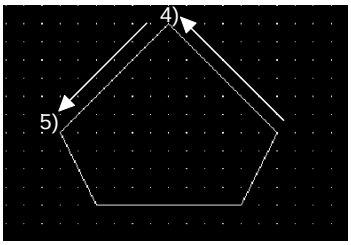
Drag from start point 1) to end point 2) of the first side, and release the left button of the mouse.

→



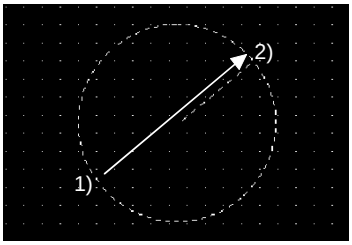
A dashed line is displayed. Click at the end point of next side 3).

→



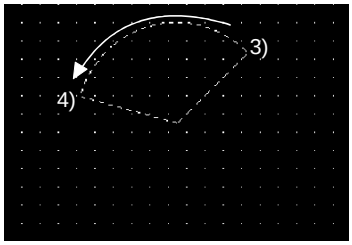
Repeat the operation in 3) until the desired figure is drawn. Double click 4) to complete drawing.

(6) Arc



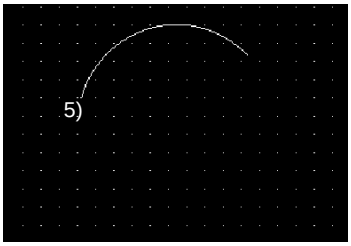
Drag from start point 1) to end point 2) to determine the radius of arc. A dashed line is displayed inside the circle.

→



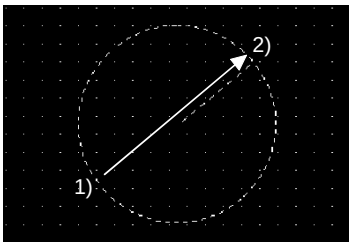
Click the left mouse button at the start point of arc 3), and move the cursor to end point 4).

→



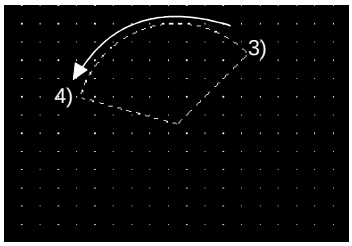
Click end point 4) to complete drawing.

(7) Sector



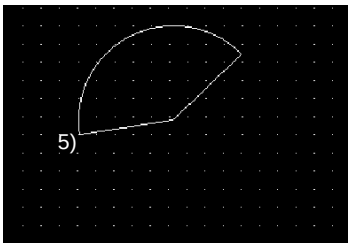
Drag from start point 1) to end point 2) to determine the radius of sector. A dashed line is displayed inside the circle.

→



Click the left mouse button at the start point of sector 3), and move the cursor to the end point 4).

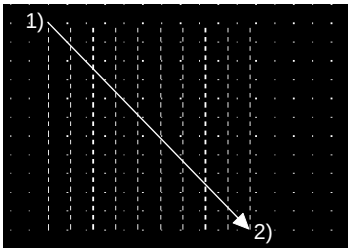
→



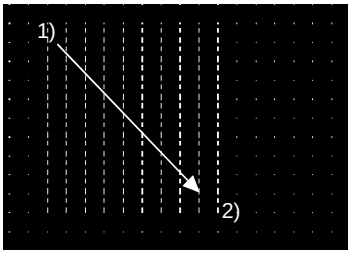
Click end point 4) to complete drawing.

(8) Scale

Drag from start point 1) to end point 2), and release the left button of the mouse.

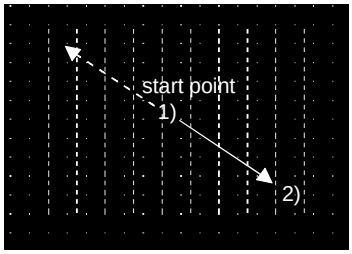


Draw while pressing the Shift key.



A scale with the same vertical and horizontal sizes can be drawn.

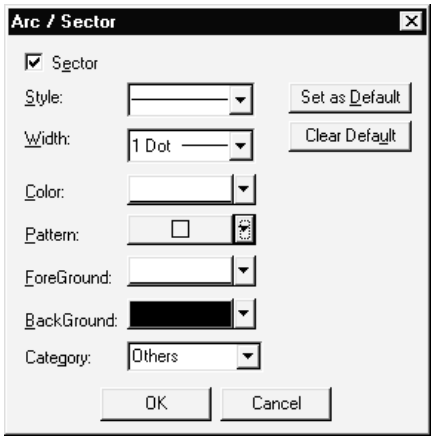
Draw while pressing the Ctrl key.



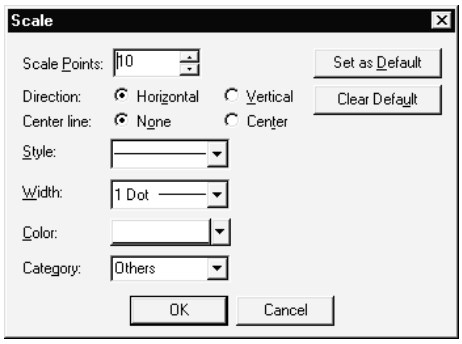
A scale can be drawn from the start point as a center.

8 - 3

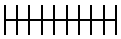
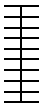
3 Double click a figure to determine the attribute.



(Ex.: Setting of arc/sector)



(Ex.: Setting of scale)

Item	Description	A	F
Sector ∗1	This is checked to create a sector. Checked Not checked	○	×
Scale Points ∗2	Number of lines (2 to 255) on the scale is set.	○	×
Direction ∗2	Direction of the scale is selected. Horizontal:  Vertical: 	○	×
Center line ∗2	Position of the center line that makes a right angle to the scale is selected. Center: None:	○	×
Style	Line style of the figure is selected.	○	○
Width	Line width of the figure is selected.	○	×
Color	Line color of the figure is selected.	○	○
Pattern ∗4	Filling pattern is selected.	○	○
ForeGround ∗4	Display color of filling pattern is selected.	○	○
BackGround ∗4	Background color of filling pattern is selected.	○	○
Category	If a category is assigned to the figure, the category is selected. (☞ Section 9.1.2 "Managing object/figure for each application")	○	○
Set as Default ∗3	Click this to use the current attribute as the default user setting. In the next attribute setting, the default user setting is displayed.	○	○
Clear Default	Click this to return the attribute as the default value to the initial status.	○	○

Refer to the next page for details of ∗1 to ∗4.

8 - 4

＊1 Sector

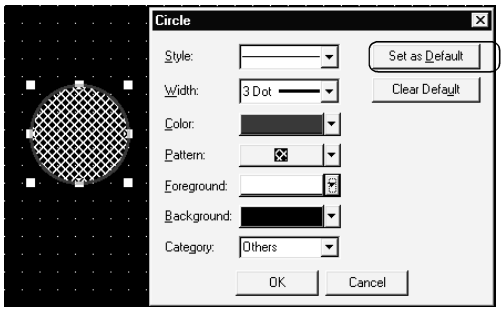
This is the setting item only for arc and sector.

＊2 Scale points, direction and center line

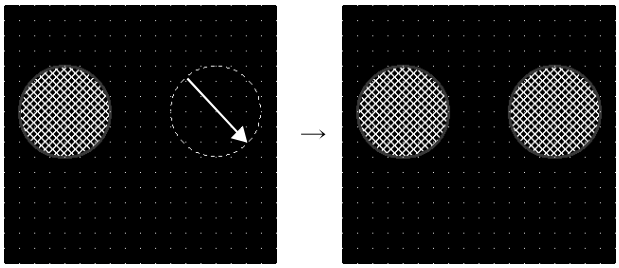
These are the setting items only for scale.

＊3 Set as Default

Set the user attribute as the default value. Figures with the same attribute can be drawn continuously.



Click the "Set As Default" button.



When the same figure is drawn next time, it can be drawn with the values set as default.

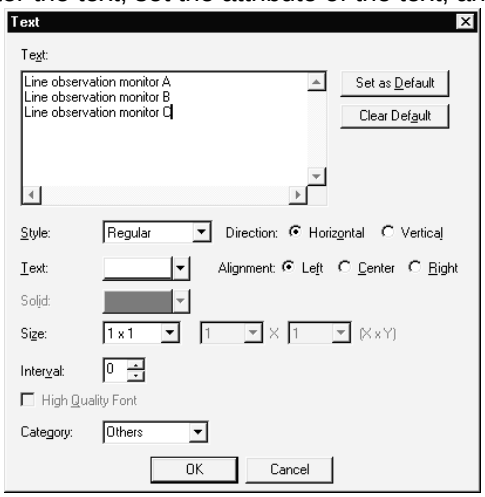
＊4 Pattern, Foreground, Background

These are the setting items only for rectangle, circle (ellipse), polygon, arc (elliptical arc) and sector.

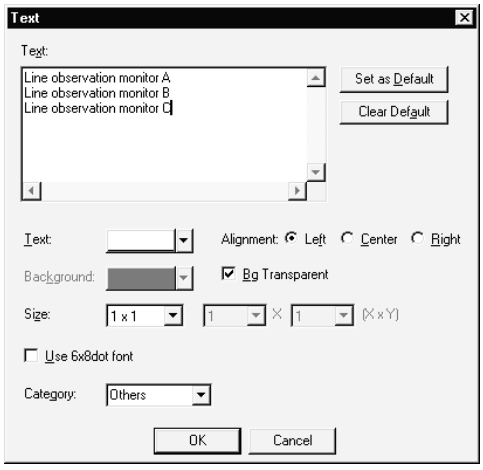
8 - 5

8.1.2 Entering text

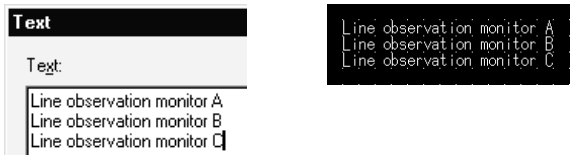
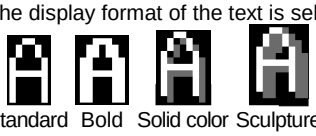
1. Perform either of the following operations:
   - Click A (Text).
   - Select the [Figure] → [Text] menu.
2. Click on the screen. The text figure dialog box appears.
   Enter the text, set the attribute of the text, and click the OK button. The entered text is displayed.



GOT-A900 Series



GOT-F900 Series

Item	Description	A	F
Text	Text you want to display is entered. • Maximum 512 characters can be entered. (A line feed is counted as one character.) • Text can be entered in multiple lines. Press the Enter key at the end of the line to feed a line. <Input Ex.> <Display Ex.>  	○	○
	Input an external character to be displayed (which should be created in advance using the external character creation function). When the external character No. is sandwiched with "| (half-width vertical bar)", a corresponding external character is displayed as one character. When "|1||2|" is input, two characters whose external character Nos. are 1 and 2 are displayed.	×	○
Style	The display format of the text is selected.  Standard Bold Solid color Sculpture	○	×
Text	Color of the text is selected.	○	○
Direction	Direction of the text (horizontal/vertical) is selected. [Horizontal] AAA [Vertical] A A A	○	×

Item	Description	A	F
Alignment	Reference position to align multiple text lines is selected. (It is available only when the [Direction] is set to "Horizontal.") Left: AAAA / BB / CCCC Right: AAAA / BB / CCCC Center: AAAA / BB / CCCC	○	○
Solid	Solid color is selected when the [Style] is set to [Solid] or [Sculpture].	○	×
Bg transparent	Check this to make the background of the text transparent.	×	○
Size	Text size (magnifying factor of vertical × horizontal sizes) is selected. When the magnifying factor is x1 horizontal and x1 vertical, the text size is 8 × 16 dots (horizontal × vertical). GOT-A900 Series: A x0.5 to x8 / x0.5 to x8 GOT-F900 Series: A x0.5 to x8 / x1 to x8	○	○
Interval	Interval between lines is set. AAA / BBB — Interval	○	×
High Quality Font	Check this to use the high quality font. (It is available only when the horizontal and vertical "sizes" are set to 2, 4, 6 or 8 times.)	○	×
Category	When a category is assigned to the figure, the category is selected. (☞ Section 9.1.2 Managing object/figure for each application)	○	○
Use 6 × 8 dot font	Text with the font size of 6 × 8 dots is displayed.	×	○
Set as Default	Click this to use the current attribute as the default user setting. In the next attribute setting, the default user setting is displayed.	○	○
Clear Default	Click this to return the attribute as the default value to the initial status.	○	○

Remark

(1) Precautions for vertical text

If the text is displayed in the vertical direction, the text is displayed as follows:

(Ex. 1) "-"

Horizontal : 10 - 20
Vertical : 1 / 0 / - / 2 / 0

(Ex. 2) "Caution"

Horizontal : Caution
Vertical : (/ C / a / u / t / i / o / n /)

(2) Font types that can be displayed on GOT

(a) Font types displayed on the GT Desinger2 can be displayed on the GOT. However, fonts that are displayed as "?" or in different sizes after arrangement on the drawing screen cannot be displayed on the GOT even if these fonts are correctly defined and displayed only on the screen.

(b) The GOT can display Japanese (Unicode compatible font), Korean, Chinese (Mandarin), English, German, French and different languages in the world.

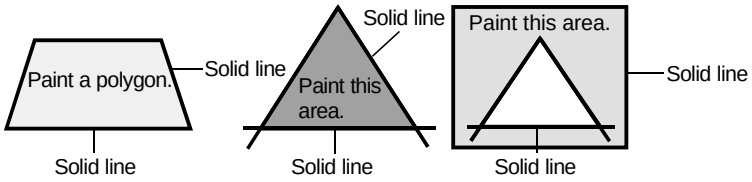
8.1.3 Painting figures

Closed area and polygon are painted.

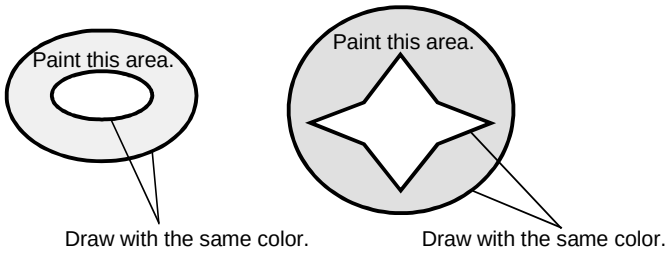
1 Before painting (filling)

Draw areas for painting as follows:

(1) Close the area to paint with solid lines.



(2) Use the same color for outlines of the area to be painted.



Remark

(1) Precautions for figure to be painted

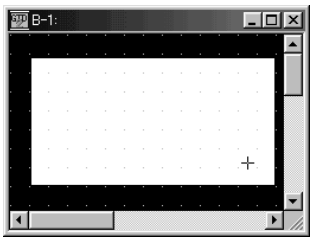
(a) Note that any opening of the outline leads to protrusion of paint from the edge of the figure.

(b) Inside of the figure drawn with the same boundary color as the background color cannot be painted. Select a boundary color different from the background color.

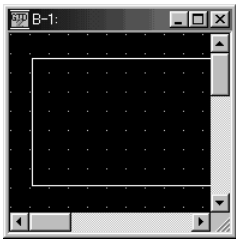
(2) Display of paint mark

Figures are not painted unless the paint mark is displayed on the screen.

The paint mark is displayed on the screen.



The paint mark is not displayed on the screen.



(3) Redisplay

If paint is used, unpainted areas may occur.
Redisplay provides correct display.
Refer to the following for redisplay.

☞ 3.4.5 Redisplaying drawing screen

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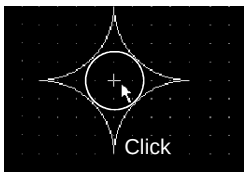
2 Painting

1 Perform either of the following operations:

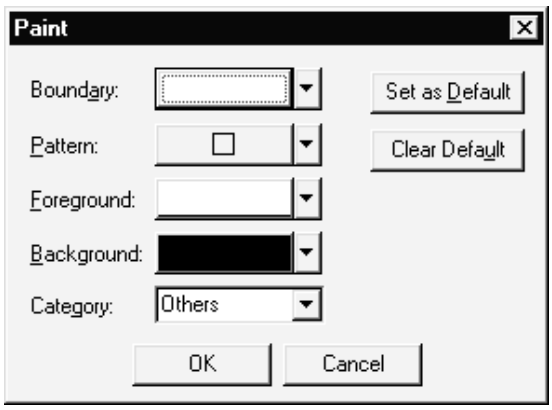
• Click (Paint).

• Select the [Figure] → [Paint] from the menu.

2 Move the cursor to the area for painting and click within the paint area.

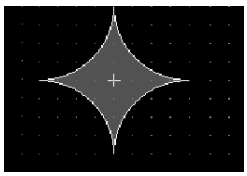


3 The paint setting dialog box appears. Set the attribute, and click the OK button.



Item	Description	A	F
Boundary color	The boundary color of the area is selected. The line set here is the boundary line of the painted area.	○	×
Pattern	Filling pattern is selected.	○	×
Foreground	The color of filling pattern is selected.	○	×
Background	Background color of filling pattern is selected.	○	×
Category	When a category is assigned to the figure, the category is selected. (☞ Item 9.1.2 Managing object/figure for each application)	○	×
Set As Default	Click this to use the current attribute as the default user setting. In the next attribute setting, the default user setting is displayed.	○	×
Clear Default	Click this to return the attribute as the default value to the initial status.	○	×

4 The paint mark is displayed at the click position and the figure is painted.



The paint mark is displayed on the GT Desinger2 only and not on the GOT.
To edit the attribute of painting, double click the paint mark.

8.1.4 Pasting figure data of BMP file

This function imports figure data (BMP/DXF (AutoCAD drawing file) format) to GT Desinger2 and pastes the figure on the screen.

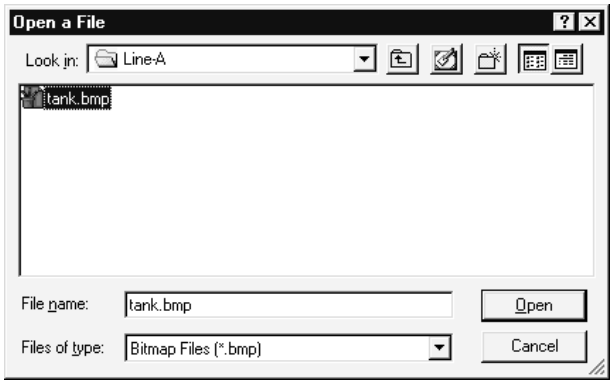
1 Operation method

1 Perform either of the following operations:

File format	Description	Operation	A	F
BMP	BMP format file is imported as an image.	▪ (Image data) ▪ [Figure] → [Import Image] menu	○	×
DXF	DXF format file is imported as an image.	▪ (Import DXF) ▪ [Figure] → [Import DXF] menu	○	○

2 The Open a File dialog box appears.

Select the file of the figure data to be imported and click the Open button.

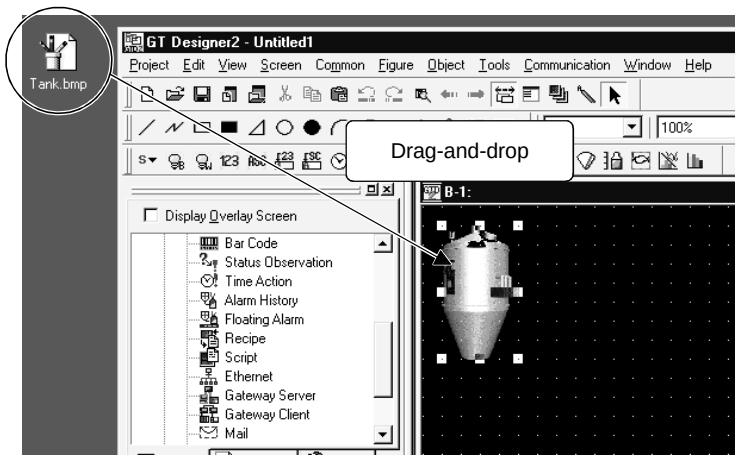


3 Pasting a file by drag-and-drop

The BMP/DXF format file can be pasted onto the GT Desinger2 screen by drag-and-drop operation.

Hint! Pasting a file by drag-and-drop

The BMP/DXF format file can be pasted onto the GT Desinger2 screen by drag-and-drop operation.



1 BMP format file

(1) Compatible BMP format file
2-color/16-color/256-color BMP format data can be imported.

(2) Editing BMP format figure data
Click the BMP format figure data to start the painting software. Then, modify the figure.
Closing the software ensures the modification on the figure data.

(3) Category
After being imported, the BMP format data will be registered and stored in “Others”.

2 DXF format file

(1) Compatible DXF format data

(a) Compatible D XF format data
The DXF format data created using the following Auto CAD (version) can be imported.
- Release 12
- Release 13
- Release 14

(b) Notes on importing data
- The data with the layer off cannot be converted.
- Only the Shift JIS code text is compatible.
- The coordinate unit “1” is converted to 1 dot on GT Designer2.
- 10 minutes or longer may be required in some cases.
- The figure bigger than 2048 x 1536 dot cannot be imported.

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(c) Details of DXF data import

The following DXF data can be imported to GT Designer2.
If some figures or attributes cannot be imported, draw them or make the relevant settings on GT Designer2.

Before import (DXF data)	After import (GTD2 data)	Remarks	A	F
ARC	Arc	-	○	×
ATTDEF	(Ignored)	-	○	○
ATTRIB	Text	▪ The text size is converted to the nearest one (0.5 to 8 times) of GT Desiger2. ▪ The rotation setting is converted to the nearest one in 90-degree units. For GOT-F900 series, always converted to “0”degree, i.e., “No rotation”. ▪ The text style including slant angle is not supported.	○	○
CIRCLE	Circle	▪ For GOT-F900 series, converted to a line.	○	○
DIMENSION	Group	▪ The color and line style are converted based on the DIMENSION block definition instead of the layer.	○	○
ELLIPSE	Circle or Arc	▪ The slanted figure is converted so that its main axis will be rotated horizontally or vertically.	○	×
INSERT	Group	▪ The color and line style are converted based on the DIMENSION block definition instead of the layer. The scale and rotation angle are not supported.	○	○
LEADER	Line Free Form	▪ The figure is converted to be a line free form (the end points are connected in a straight line).	○	×
LINE	Line	-	○	○
LWPOLYLINE	Line Free Form or Polygon	▪ The figure is converted to be a line free form or polygon (the end points are connected in a straight line). ▪ The curved lines between the points are ignored.	○	×
MLINE	Line Free Form	▪ The MLINESTYLE is not supported. Each line free form color and the line style are converted based on the layer definition. ▪ Cap processing is not supported.	○	×
MTEXT	Text	▪ The text size is converted to the nearest one (0.5 to 8 times) of GT Desiger2. ▪ The rotation setting is converted to the nearest one in 90-degree units. For GOT-F900 series, always converted to “0”degree, i.e., “No rotation”. ▪ The form code is deleted. ▪ The text style is not supported.	○	○
POINT	Circle, Rectangle, Line	-	○	○
POLYLINE	Line Free Form or Polygon	▪ The figure is converted to a line free form or polygon (the end points are connected in a straight line). ▪ The curved lines between the points are ignored.	○	×
SOLID	Polygon	-	○	×
SPLINE	Line Free Form or Polygon	▪ The figure is converted to be a line free form or polygon (the fit lines are connected in a straight line).	○	×
TEXT	Text	▪ The text size is converted to the nearest one (0.5 to 8 times) of GT Desiger2. ▪ The rotation setting is converted to the nearest one in 90-degree units. For GOT-F900 series, always converted to “0”degree, i.e., “No rotation”. ▪ The text style including slant angle is not supported.	○	○
TRACE	Polygon	-	○	×

Point Notes on importing data

GT Desginer2 converts only the compatible characters within a DXF data during data import.
Therefore, some characters may appear differently from the original data.
Make sure to modify the figure after data import.

Example 1) “ ϕ ” cannot be imported.
As the “ ϕ ” in DXF data is not the Shift JIS code, this character cannot be imported.

Example 2) The BLOCK created with rectilinear and circle figures on the AutoCAD screen appear larger than the original size.
As the scale is set in the INSERT, the BLOCK cannot be correctly imported.

(d) Line

Each line is converted as shown below (1-dot width).

Before import (DXF data)	After import (GTD2 data)	A	F
CONTINUOUS	Full line	○	○
DASHED	Dotted line	○	○
HIDDEN	Dotted line	○	○
CENTER	Dashed line	○	○
PHANTOM	Dashed line	○	○
User definition	Full line	○	○
Others	Full line	○	○

(e) Color

The color is converted as shown below.

Before import (DXF data)		After import (GTD2 data)		A	F
Red	(0x09)	Red	(224)	○	○
Yellow	(0x02)	Yellow	(252)	○	○
Green	(0x03)	Green	(28)	○	○
Light blue	(0x04)	Light blue	(31)	○	○
Blue	(0x05)	Blue	(3)	○	○
Purple	(0x06)	Purple	(227)	○	○
White	(0x07)	White	(255)	○	○
Black	(0x08)	Black	(0)	○	○
Dark red	(0x09)	Dark red	(160)	○	○
Dark yellow	(0x0A)	Dark yellow	(180)	○	○
Dark green	(0x0B)	Dark green	(20)	○	○
Dark-light blue	(0x0C)	Dark-light blue	(22)	○	○
Dark blue	(0x0D)	Dark blue	(2)	○	○
Dark purple	(0x0E)	Dark purple	(162)	○	○
Dark white	(0x0F)	Dark white	(109)	○	○
Others		Others	(255)	○	○

(2) Editing DXF format figure data

To edit the grouped figure data on GT Desinger2, ungroup it once.
After the edition, group them again.

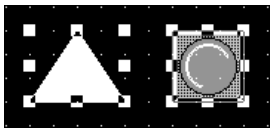
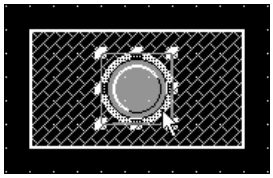
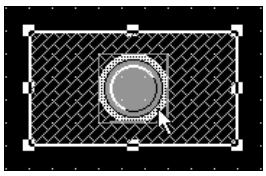
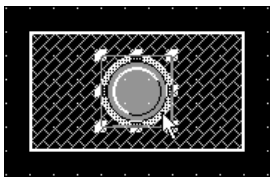
(3) Category

After being imported, the DXF format data will be registered and stored in ”None”.
(The ungrouped data will be also stored in “None”.)
If necessary, register it again.

8.2 Editing Figure and Object

8.2.1 Selecting figure and object

Selection items with the cursor (figures and objects) can be changed by clicking.
It is convenient to select the cursor type suitable for the editing item.

Cursor type	Description	Selecting operation	A	F
"Figure and Object" edit cursor	Selection and editing can be performed without distinguishing between figures and objects. (Cursor set as initial setting)  Both figure and object are selected.  If the figure and the object are overlapped, the object is selected.	• (Select: Figure and Object) • [Edit] → [Object of Selection] → [Figure and Object] from the menu	○	○
"Figure" edit cursor	Figures can be edited. Only the figure is selected.  If the figure and the object are overlapped, only the figure is selected.	• (Select: Figure) • [Edit] → [Object of Selection] → [Figure] from the menu	○	○
"Object" edit cursor	Objects can be edited. Only the object is selected.  If the figure and the object are overlapped, only the object is selected.	• (Select: Object) • [Edit] → [Object of Selection] → [Object] from the menu	○	○

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Hint!

Selection/de-selection of multiple figures or objects

(1) Selecting one from overlapped figures or objects

Move the cursor to the overlapped figures or objects and click while pressing the
Ctrl key.

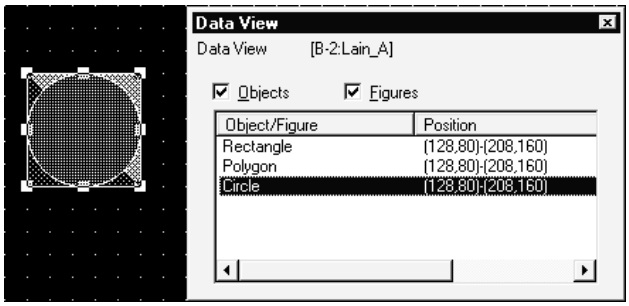
(2) De-selecting one from multiple figures or objects

Move the cursor to the boundary line of a desired figure/object. Click while pressing the Shift key.

(3) Selecting figures or objects from the data view

The data view displays figures and objects on the screen in a list.
If figures or objects are overlapped, a desired figure/object can be simply selected from the data view.

Section 9.1.3 Selecting overlapped figure easily (Data View)



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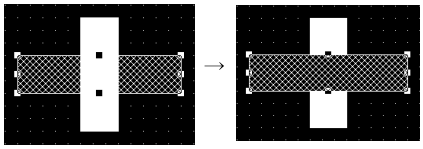
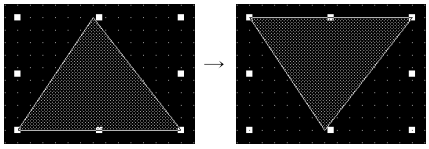
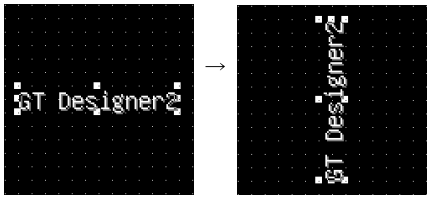
8.2.2 Editing figures and objects

Different types of editing can be made for the figures and objects arranged on the screen.

1. Select the desired figure/object for editing.
2. Perform the following operations according to the editing details.

Function	Description	Operation	A	F
Delete	Figures and objects are deleted.	[Edit] → [Delete]	○	○
Cut	Figures and objects are cut.	• (Cut) • [Edit] → [Cut]	○	○
Copy	Figures and objects are copied.	• (Copy) • [Edit] → [Copy]	○	○
Paste	The cut/copied figures and objects are pasted.	• (Paste) • [Edit] → [Paste]	○	○
Front/Back	The front/back position of the figure/object is replaced. (Ex.) Bringing selected figure to the front 	• (Bring to Front) • [Edit] → [Bring to Front]	○	○
		• (Send to Back) • [Edit] → [Send to Back]	○	○
Flip Vertical/Flip Horizontal	The selected figure is flipped. (Not available for objects) (Ex.) Flipping selected figure vertically 	• (Flip Vertical) • [Edit] → [Rotate/Flip] → [Flip Vertical] • (Flip Horizontal) • [Edit] → [Rotate/Flip] → [Flip Horizontal]	○	○
Rotate Left/Rotate Right	Figure is rotated 90 degrees to right/left. (Not available for objects) (Ex.) Rotating selected figure 90 degrees to left 	• (Rotate Left) • [Edit] → [Rotate/Flip] → [Rotate Left] • (Rotate Right) • [Edit] → [Rotate/Flip] → [Rotate Right]	○	○

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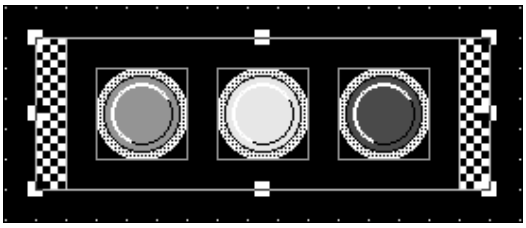
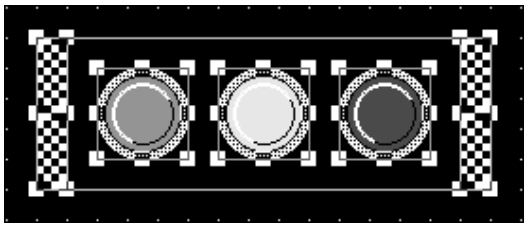
8.2.3 Grouping/Ungrouping multiple figures and objects

Grouping of multiple figures and objects enables users to handle them as a single figure.



Group



Ungroup

1. Select the desired figures and objects for grouping (ungrouping).
2. Group/ungroup the selected figures and objects by either of the following operations:

Function	Description	Operation	A	F
Group	Multiple figures and objects are grouped.	• (Group) • [Edit] → [Group]	○	○
Ungroup	Multiple figures and objects are ungrouped.	• (Ungroup) • [Edit] → [Ungroup]	○	○

8.2.4 Undo and redo

After deletion or movement of figures and objects, the last operation can be cancelled or repeated. Maximum 500 previous operations can be recorded.

1 Undo

The last operation is cancelled.

- Click (Undo).
- Select the [Edit] → [Undo] from the menu.

2 Redo

The last operation is repeated or the operation cancelled with (Undo) is recovered.

- Click (Redo).
- Select the [Edit] → [Redo] from the menu.

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8.2.5 Aligning figures and objects

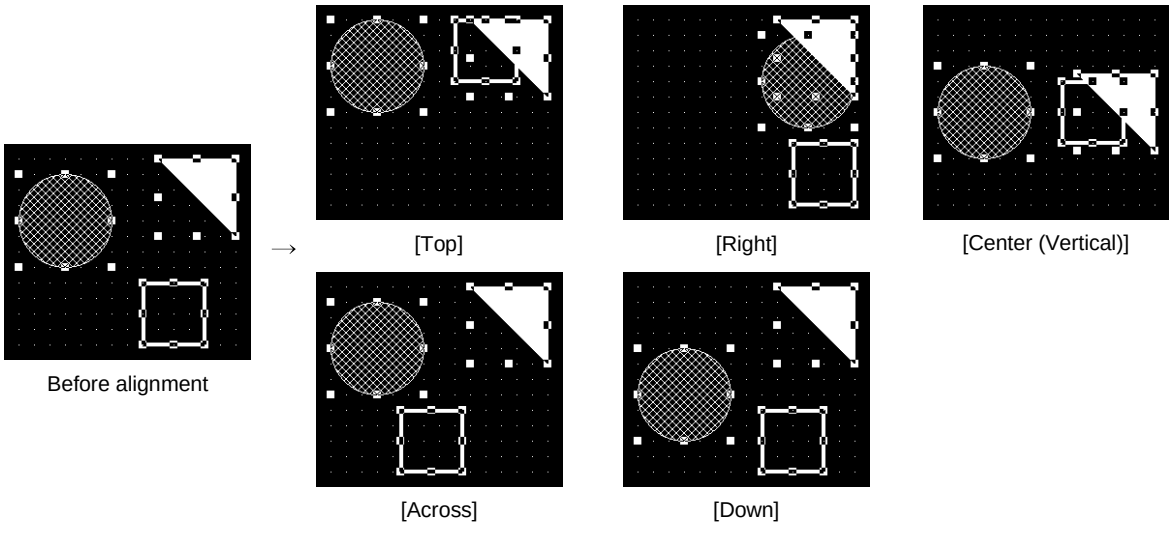
Multiple figures and objects can be aligned in several patterns.

1 Aligning in one direction

1. Select the desired figures and objects for alignment.
2. Perform the following operations according to the alignment:

Function	Description	Operation	A	F
Left	Figures and objects are aligned with the leftmost figure.	• (Align: Left) • [Edit] → [Align] → [Left]	○	○
Center (Horizontal)	Figures and objects are aligned at the center in the horizontal direction.	• (Align: Center (Horizontal)) • [Edit] → [Align] → [Center (Horizontal)]	○	○
Right	Figures and objects are aligned with the rightmost figure.	• (Align: Right) • [Edit] → [Align] → [Right]	○	○
Top	Figures and objects are aligned with the uppermost figure.	• (Align: Top) • [Edit] → [Align] → [Top]	○	○
Center (Vertical)	Figures and objects are aligned at the center in the vertical direction.	• (Align: Center (Vertical)) • [Edit] → [Align] → [Center (Vertical)]	○	○
Bottom	Figures and objects are aligned with the lowermost figure.	• (Align: Bottom) • [Edit] → [Align] → [Bottom]	○	○
Across	Selected figures are equally aligned in the horizontal direction.	• (Align: Across) • [Edit] → [Align] → [Across]	○	○
Down	Selected figures are equally aligned in the vertical direction.	• (Align: Down) • [Edit] → [Align] → [Down]	○	○

(Ex.) Alignment of figures and objects

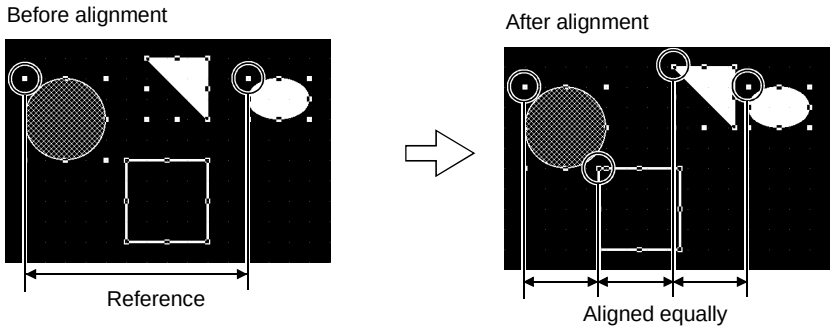


8 - 18

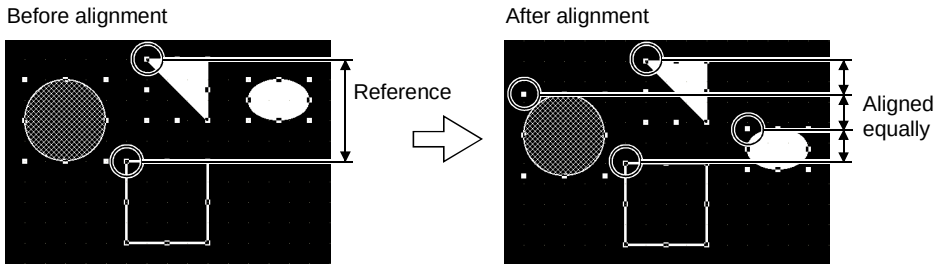
Remark Across and Down

The "Across" function aligns the figures/objects equally based on the top-left coordinates of the leftmost and rightmost figures/objects.
The "Down" function aligns the figures/objects equally based on the top-left coordinates of the uppermost and lowermost figures/objects.

Across



Down

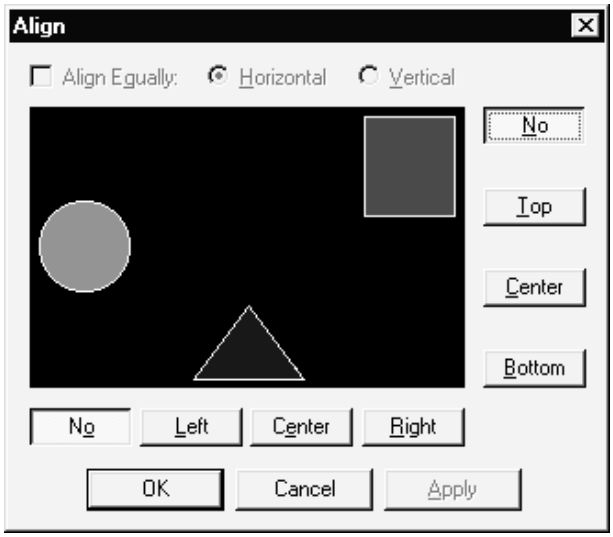


8 - 19

2 Alignment in combination of multiple directions

1. Select the desired figures and objects for alignment.
2. Perform either of the following operations:
   - Click (Align).
   - Select the [Edit] → [Align] → [Align] from the menu.
3. The Align dialog box appears.

   Click any direction button. The image of alignment is displayed.
   Select the direction of alignment, and click the OK button.



Item	Description	A	F
No	Alignment is not performed.	○	○
Top	Figures are aligned with the top figure.	○	○
Bottom	Figures are aligned with the bottom figure.	○	○
Left	Figures are aligned with the leftmost figure.	○	○
Right	Figures are aligned with the rightmost figure.	○	○
Center	Figures are aligned at the center in the selected direction.	○	○
Align Equally	Check this to align figures equally. Across : Figures are aligned equally in the horizontal direction. Down : Figures are aligned equally in the vertical direction.	○	○

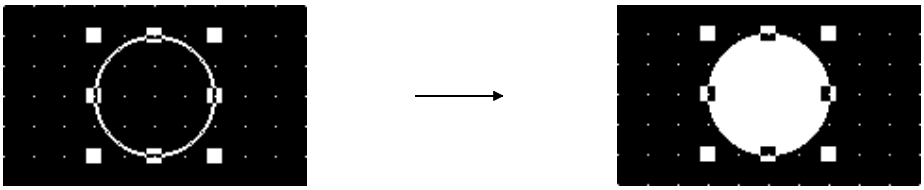
8 - 20

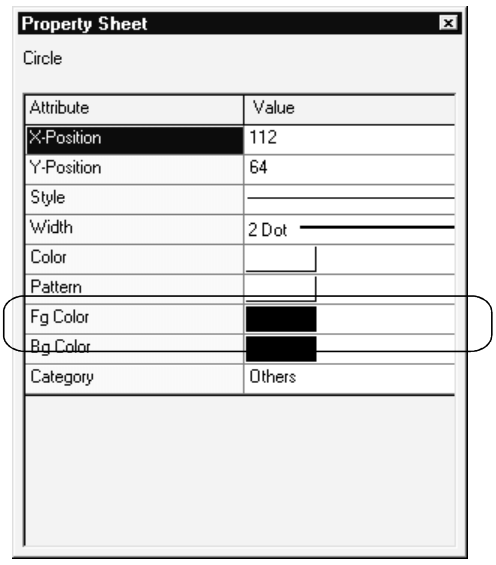
8.2.6 Changing attributes of figures and objects

1 Changing attributes with property sheet

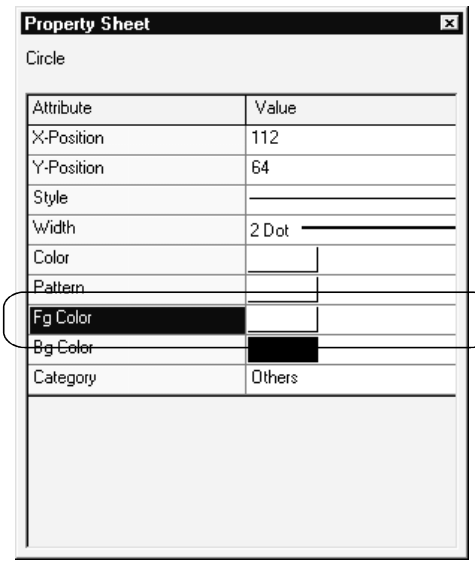
1. Select the desired figure/object.
2. Change the attribute of the selected figure/object on the property sheet.

(Ex.) Changing foreground color of a circle from black to white





Changing foreground color



The change is displayed on the figure.

Remark

(1) Changing attributes of multiple figures/objects

Attributes of different types of objects/figures cannot be changed at a time.

Ex.) Touch switch and lamp
Bit lamp and word lamp
Circle and rectangle

Attributes of grouped objects/figures of different types cannot be changed at a time, either.

(2) Figure frame of object

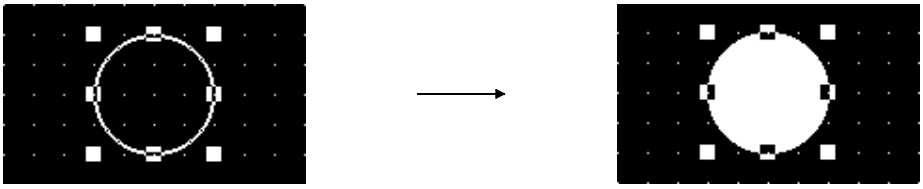
The figure frame of object cannot be set with "Yes/No" on the property sheet. Set "Yes/No" of the figure frame by using the dialog box of each object.

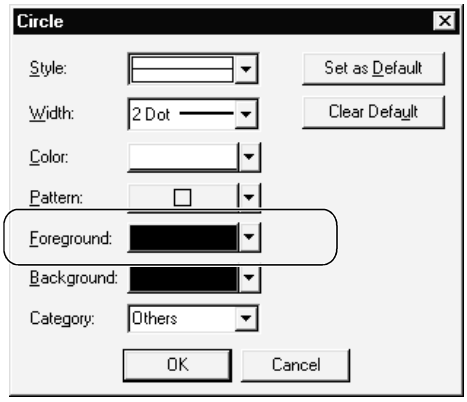
8 - 21

2 Changing attribute with dialog box

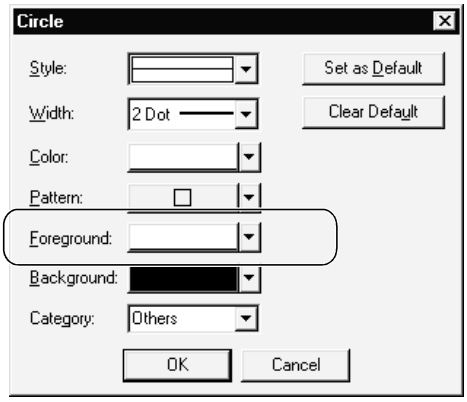
1. Select the desired figure/object.
2. Double click on the selected figure/object. The settings dialog box of each figure/object appears. Change attributes there.
   For the settings dialog box of each figure/object, see below:

(Ex.) Changing foreground of a circle from black to white





Change the setting of foreground.



The change is displayed on the figure.

- Settings dialog box of each figure
  ☞ Section 8.1.1 Drawing figures
- Settings dialog box of object
  ☞ GT Desinger2 Version1 Reference Manual

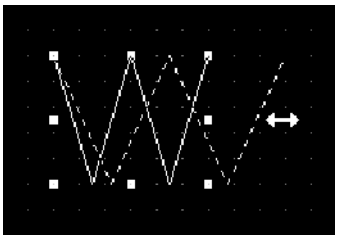
8 - 22

8.2.7 Changing size of figures/objects

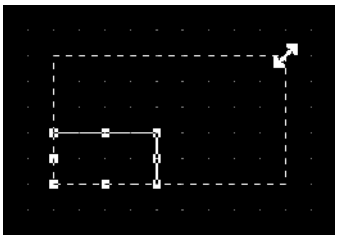
1 Changing overall size (scaling up/down)

1. Select the desired figure or object.
2. Move the cursor to a handle of figure or object. Drag it to change the size of figure or object.

(Ex.) Changing vertical and horizontal sizes



(Ex.) Changing vertical and horizontal sizes from corner

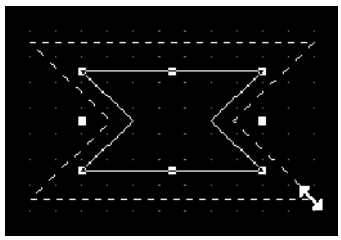


Hint!

(1) Operation in combination with the Ctrl and Shift keys

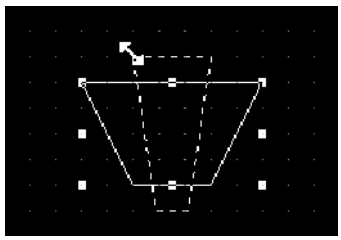
Operation in combination with the Ctrl and Shift keys allows the following changes of size:

(Ex.) Changing sizes without changing the horizontal to vertical ratio



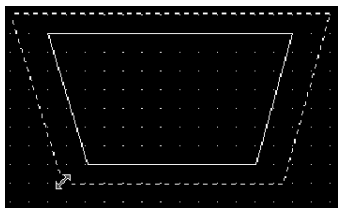
Drag while pressing the Shift key.

(Ex.) Changing vertical and horizontal sizes from the center



Drag while pressing the Ctrl key.

(Ex.) Changing sizes from the center without changing the horizontal to vertical ratio



Drag while pressing the Shift and Ctrl keys.

(2) Changing font size

The font size can be changed by the operation above in (1).
However, if the size of the high quality font is multiplied 1, 3, 5 or 7 times, the high quality font setting becomes invalid.
When using the high quality font, set the font size again to 2, 4, 6 or 8 times.

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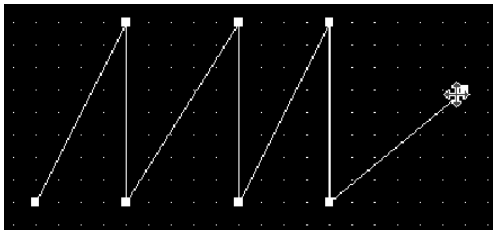
2 Changing length of specified side (Edit Vertex)

1. Select the desired figure or object.
2. Perform either of the following operations to change the handle to the "Edit Vertex" mode:
   - Click on the toolbars.
   - Select the [Edit] → [Edit Vertex] menu.
3. Move the cursor to a handle of the figure. Drag the handle to move the vertex.

(Ex.) Vertex edit of Line free form



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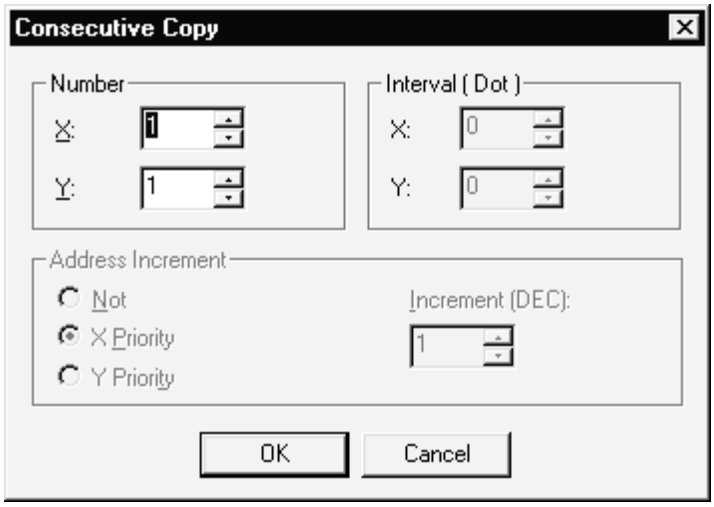
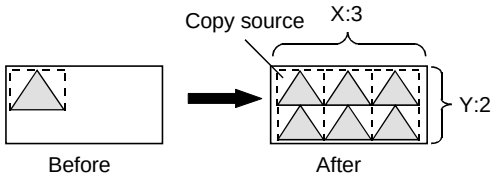
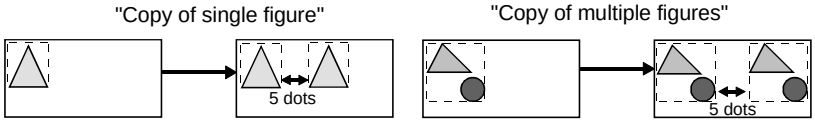
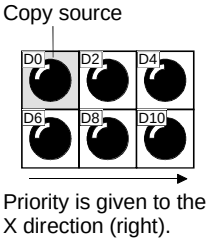
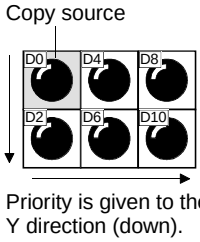
8.2.8 Copying figures and objects consecutively

Figures and objects can be copied at a time.

1. Select the desired figure or object for consecutive copies.
   (For consecutive copy of multiple figures or objects, select multiple figures/objects at a time.)
2. Select the [Edit] → [Consecutive Copy] from the menu.
   The consecutive copy dialog box appears.
   After setting the copy details, click the OK button to make copies.



Item		Description
Number		The number of figures to be produced after copying and pasting is set. For instance, if the number of copies is set to "2," one selected figure is copied once and two figures are pasted on the screen. Ex.) Number of copies: 3 in the X direction, 2 in the Y direction 
	X direction	The number of copies in the X direction (rightward from the source) is set.
	Y direction	The number of copies in the Y direction (downward from the source) is set.
Interval (Dot) ＊1		The interval (number of dots) between the source and the copy is set for copying. Ex.) Interval: 5 dots in the X direction 
	X direction	The interval (number of dots) in the X direction (right to the copy source) is set.
	Y direction	The interval (number of dots) in the Y direction (down to the copy source) is set.

Item	Description
Address Increment	It is set to offset the device of the object to the device number for the increments when copying a object. For a touch switch, the write device only for the bit/word operation is applicable. None : Increment is not performed. Priority in the X direction : Incremented in the X direction (right) Priority in the Y direction : Incremented in the Y direction (down) After selecting the priority direction, set the interval to offset the device number. Number of increments (hexadecimal): -10000 to 10000 (Ex. 1) Priority in the X direction Number of increments: 2  Priority is given to the X direction (right). (Ex. 2) Priority in the Y direction Number of increments: 2  Priority is given to the Y direction (down).

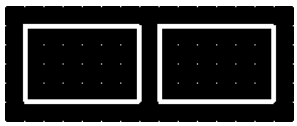
For details of ∗1, see below:

∗1 Copying with 0 interval

If a figure/object is copied with 0 interval, the pasted figure/object is overlapped with the source by 1 dot. Set the interval to 1 or more to avoid overlapping of figures or objects.

Ex.)

Copying with 0 interval.



Copying with the interval of 16

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9. USEFUL FUNCTIONS

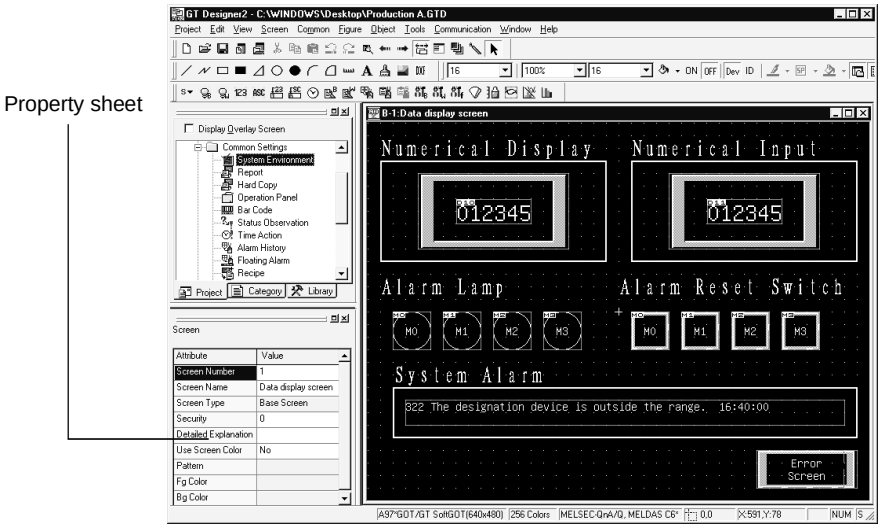
9.1 Edit Function

This chapter describes useful edit functions of the GT Designer2.

9.1.1 Batch setting of multiple objects/figures on the same screen (Property sheet)

1 What is property sheet?

The property sheet displays all setting items and details of object/figure/screen currently selected in a list. Since the property sheet allows setting of the selected object/figure/screen, the setting details can be checked and set (changed) without opening the dialog box.

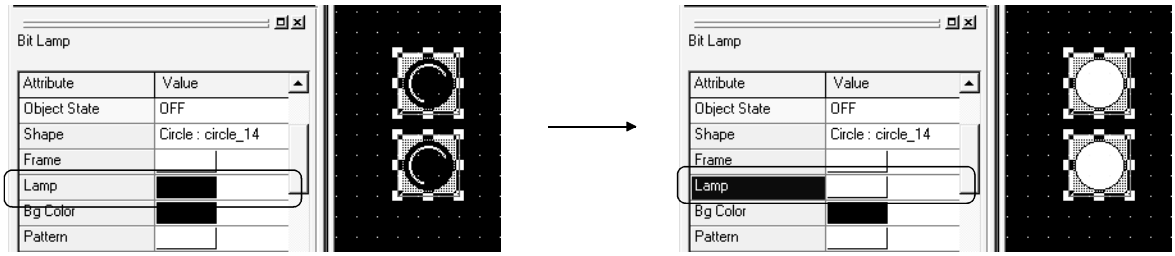


2 Useful for cases below:

It is useful when the setting of multiple objects/figures arranged on the same screen is changed at a time.

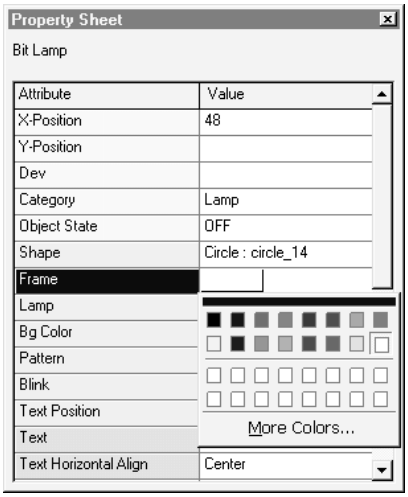
(Ex.) Changing the display color of 2 lamps at a time

Change the setting of the lamp color. The colors of all selected lamps can be changed.



3 Operation method

1. Select the desired object/figure/screen to change settings. (Multiple objects/figures can be selected.)
2. The attributes are displayed on the property sheet. Change the desired attributes.



4 Precautions

(1) Different types of objects/figures cannot be checked/set at a time.

Ex.: Touch switch and lamp
Bit lamp and word lamp
Circle and rectangle

Different types of grouped objects/figures cannot be checked/set at a time.

(2) Objects/figures distributed on multiple screens cannot be checked/set.

Hint! Batch editing objects/figures scattered on multiple screens

Use of batch edit allows change of attributes (color, device, etc.) in batch that are different in types or scattered on multiple screens.

Section 9.1.3 Batch editing attributes of objects/figures scattered on multiple screens

(3) The property sheet makes the settings of all selected objects and figures same. Note that if different devices has been set for each object, using the property sheet will change the settings of all selected objects to the same device.

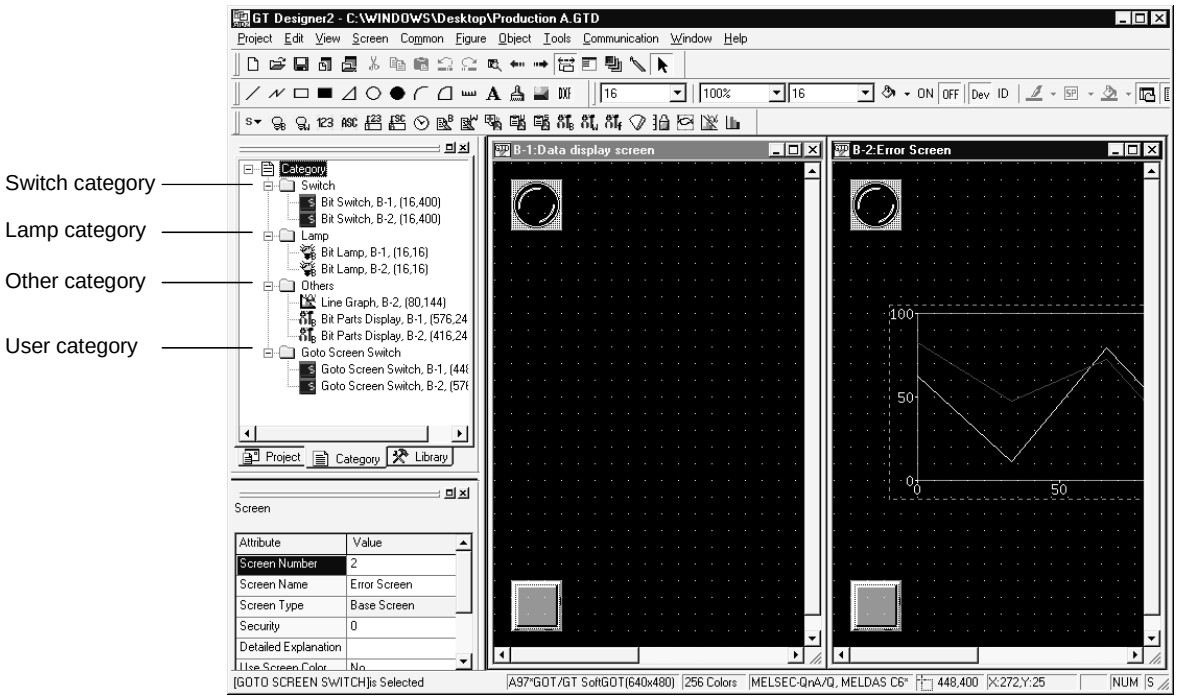
(4) The figure frame of the object cannot be set with "Yes/No" on the property sheet. Set "Yes/No" of the figure frame by using the dialog box of each object.

9 - 2

9.1.2 Batch setting and managing objects/figures for each purpose (Category workspace)

1 What is Category?

The set objects/figures are stored in any of the following categories: Switch, Lamp and Others. Sorting objects and figures into the user category for each application allows management of objects and figures.



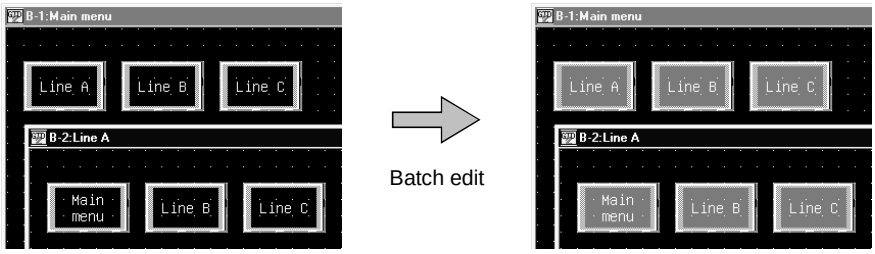
Category	Description
Switch category	All touch switches are stored.
Lamp category	All lamps are stored.
Other category	Objects and figures other than touch switches and lamps are stored.
User category	It is a category created by the user. Objects stored in the switch, lamp, other categories can be moved to the user category and categories can be created for each application.

2 Convenient for the case below:

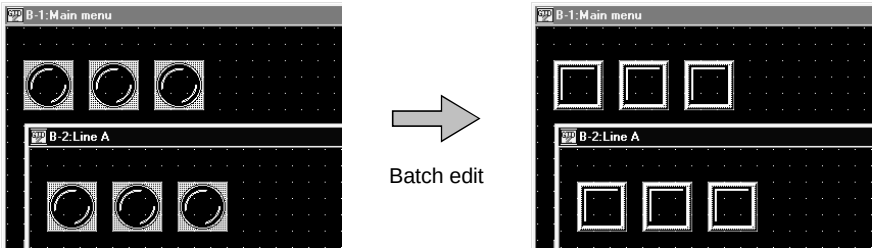
Color/device of the Goto screen switch can be changed in batch. It is convenient to make batch edit for each purpose.

Figures of the touch switch or the lamp can be changed in batch.

Ex. 1) Batch editing display color of Goto screen switch



Ex. 2) Batch editing lamp figure

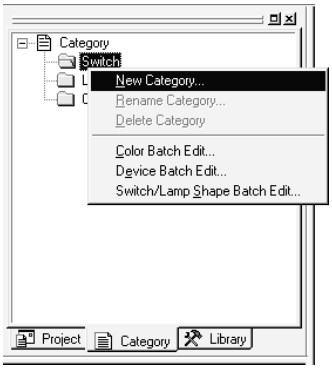


9 - 4

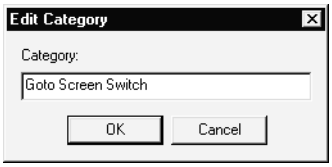
3 Creating user category

The method to create a user category is shown below:
In this section, an example of category creation for the Goto Screen switch is described.

1 Select a category from Switch, Lamp and Others. Right click the mouse and select "New Category".

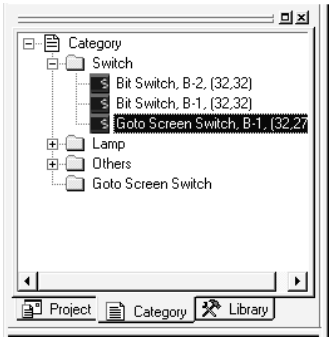


2 The Edit Category dialog box appears. Enter the category name (enter "Goto Screen Switch" here).
Click the OK button. The dialog box is closed.



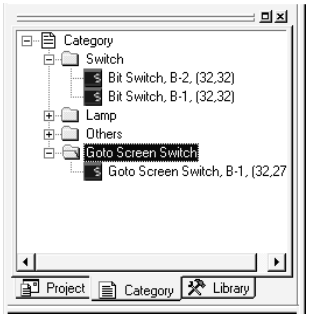
3 The user category is added.

4 Select the Goto Screen switch under the switch category and drag it to the Goto Screen Switch category.



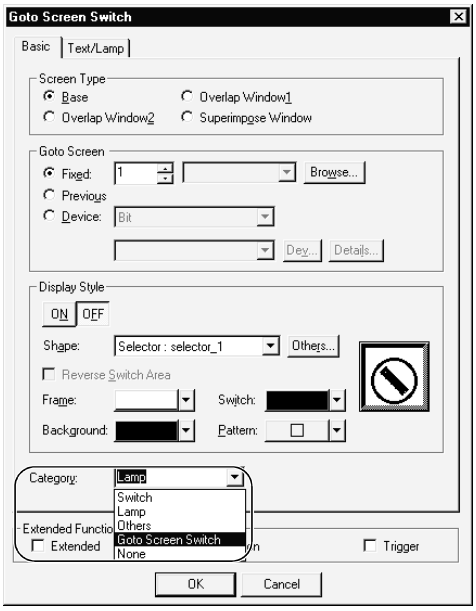
9 - 5

5 The Goto Screen switch is stored in the Goto Screen Switch category.



Hint! Category registration of objects and figures

Create a user category first. The created user category can be selected when setting the storage location of objects and figures.

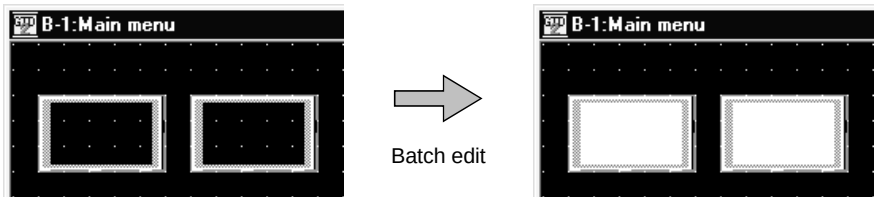


9 - 6

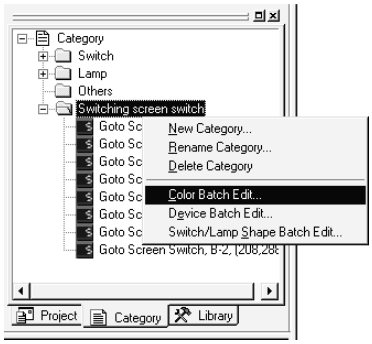
4 Method to make batch settings for each category

Batch setting method of a category is described.

An example of batch editing the switch color in the Goto screen switch category from black to white is shown here.



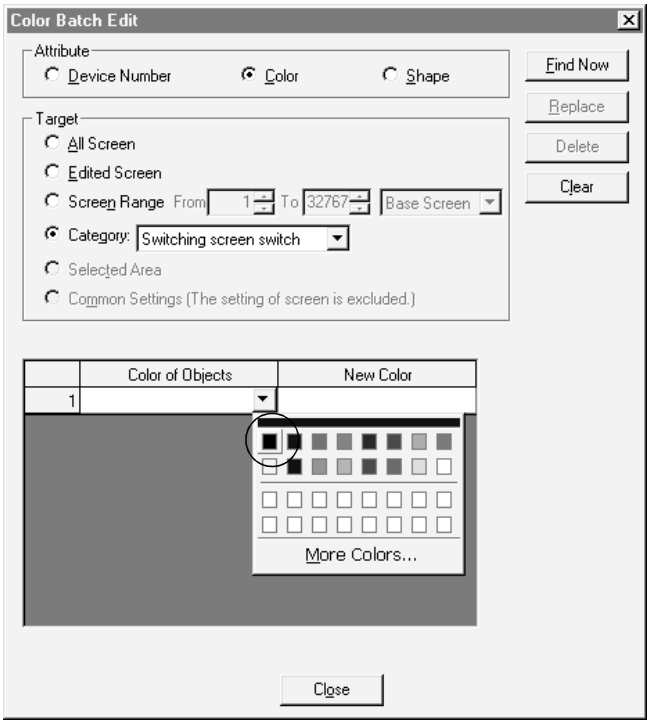
1 Select the desired category for batch edit and right click the mouse to select [Color Batch Edit].



2 The batch edit dialog box appears. Specify the color (black) before change.

Refer to the following for detailsof the batch edit dialog box.

☞ Section 9.1.3 Batch editing attributes of objects/figures scattered on multiple screens



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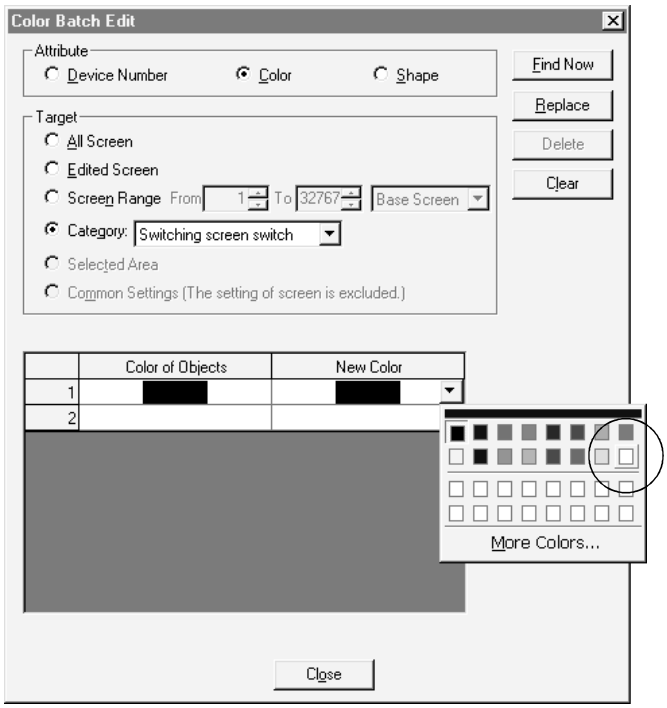
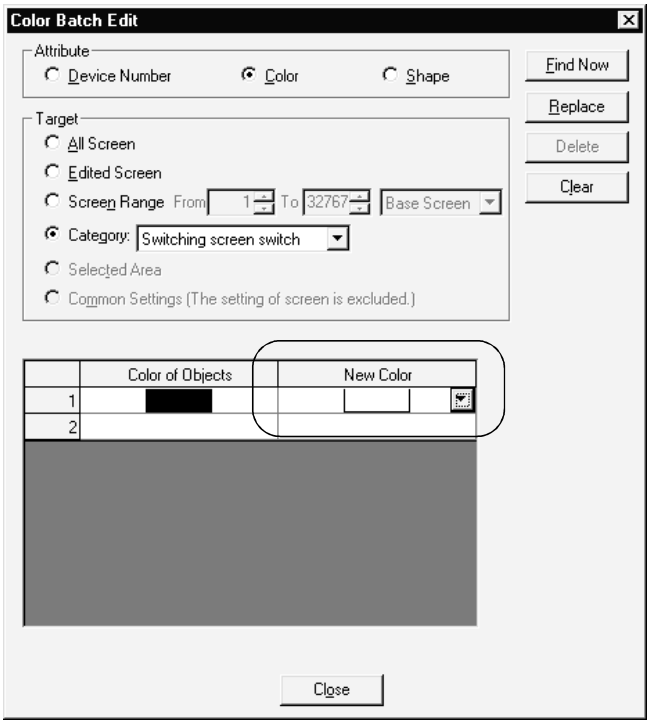
3 Specify the color (white) after change.



4 Click the Replace button. The color is changed to the specified color.
Click the Close button to close the dialog box.



9 - 8

Hint!

(1) Find Now button

Click the Find Now button to display all colors used in the category.
It is convenient to batch edit multiple devices/colors/figures.

(2) Target other than category

Other than categories, screens or common settings can be batch edited.

☞ Section 9.1.3 Batch editing attributes of objects/figures scattered on multiple screens

5 Precautions

(1) One object/figure cannot be stored in multiple categories.

(2) Multiple attributes cannot be batch edited. (Ex.: Batch edit of device and color)

(3) Refer to the precautions of batch edit before change.

☞ Section 9.1.3 Batch editing attributes of objects/figures scattered on multiple screens

(4) Closed screen are not displayed in category.

9 - 9

9.1.3 Batch editing attributes of objects/figures scattered on multiple screens (Batch edit)

1 What is batch edit?

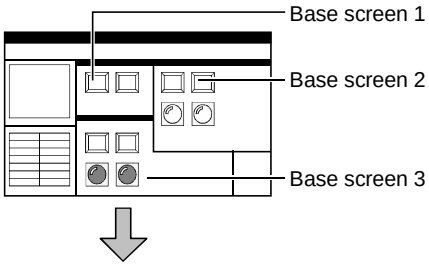
Color or other attributes of objects/figures are changed in batch.
The following attributes can be batch edited:

- Device of object
- Color of object/figure
- Figure used for lamp display/touch switch

2 Convenient for the case below:

It is convenient to batch edit device, color or lamp/switch figure of objects or figures scattered on multiple screens.
Different types of figures (circle and rectangle) or object (touch switch and value display) can be batch edited.
The following types of batch edit are available.
Each change method and image after change are shown below.

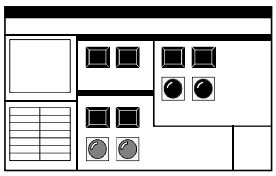
<Image before change>



<Image after change>

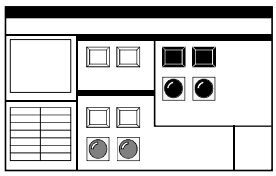
Batch editing all screens (Change of color: □ → ■)

Color of objects/figures on all screens (Base screen 1, Base screen 2, Base screen 3) is batch edited.



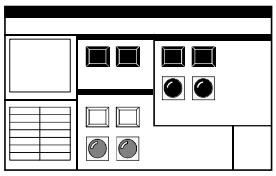
Batch editing screen (Change of color: □ → ■)

Color of objects/figures on the editing screen (Base screen 2) is batch edited.



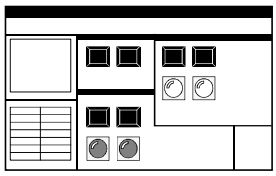
Batch editing specified screens (Change of color: □ → ■)

Color of objects/figures on screens for the specified numbers (Base screen 1 to Base screen 2) is batch edited.



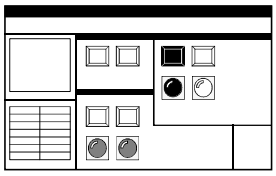
Batch editing each category (Change of color: □ → ■)

Color of the specified category (Goto screen switch) is batch edited.



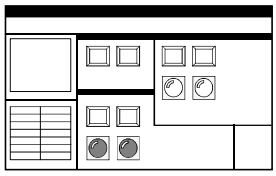
Batch editing selected areas (Change of color: □ → ■)

Color of objects/figures on the selected area in the editing screen is batch edited.



Batch editing common settings (Change of device)

Devices (Switching screen device, start trigger device of hard copy, etc.) set in the common settings are batch edited.



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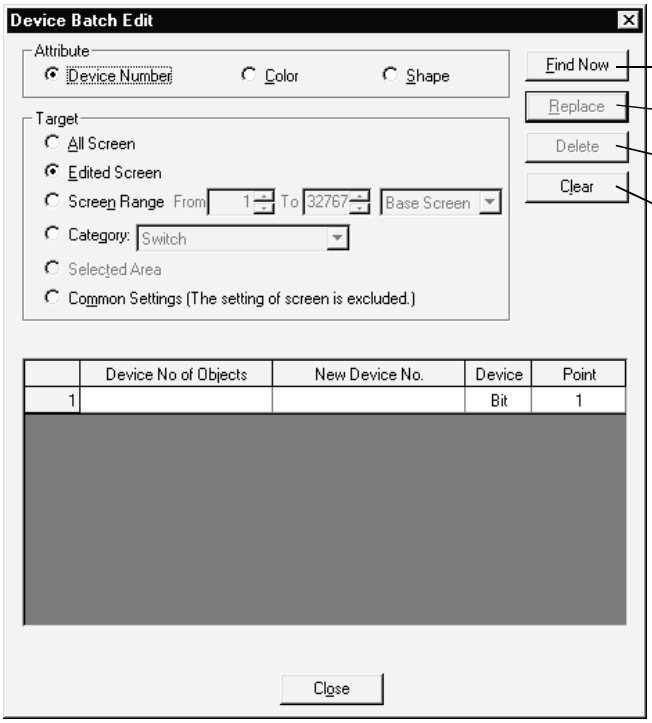
3 Operation method

The batch edit method is described.

1 Select the [Tools] - [Batch Edit] - [Device Batch Edit/Switch Lamp Shape Batch Edit/Color Batch Edit] menu.

2 The setting dialog box appears. Refer to the following descriptions for setting.



Item	Description	A	F
Attribute	Attribute for batch edit is selected. Device number : Device number is batch edited. Color : Color is batch edited. Shape : Figures of touch switch or lamp are edited.	○	○
Target *1	Unit for batch edit is selected. All Screen (including screen status monitoring) : All screens are the target for batch edit. Edited Screen (including screen status monitoring) : The editing screen is the target for batch edit. Screen Range : The specified screen is the target for batch edit. After selection, the range and the type on the screen are specified. Category : Category is the target for batch edit. After selection, select the category for batch edit. Selected Area : Objects/figures selected on the editing screen are the target for batch edit. Common Settings : Common settings are the target for batch edit.	○	○
Edit list	Attributes to be changed are set. When figures are selected by attributes, switch figures and lamp figures can be classified for setting. Device No of Objects : Device/color/figure before change is selected. New Device No. : Device/color/figure after change is selected. Device : Device type (bit/word) is selected for batch edit of device. Point : Points are set for consecutive edit of devices. (In Device No of Objects: M0/New Device No.: M10, set 4. M0 to M4 are changed to M4 to M10.)	○	○

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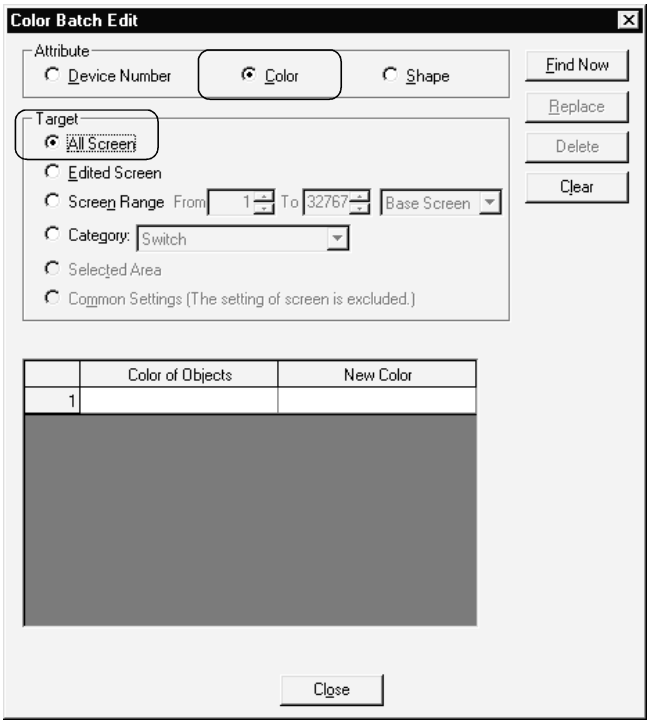
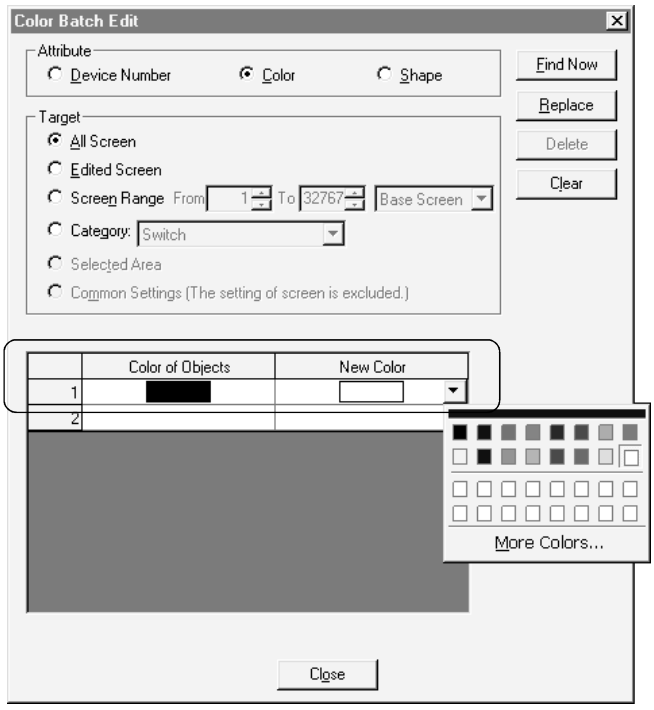
4 Method of batch edit

Method of batch edit is explained.
An example to change the color of objects or figures set on all screens from black to white is described here.

1 Display the device batch edit dialog box. Select "Color" from "Attribute and "All screen" from "Target."



2 Select black from "Color of Objects" and select white from "New Color."



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Hint! Fine Now button

Click the Find Now button to display all devices/colors/figures (either one only) used in all screens.
It is convenient to batch edit multiple devices/colors/figures.

3 After selection, click the Replace button. Items set in black are changed to white.

5 Precautions

(1) Change of device

(a) When the device format (bit device, word device, bit specification for word device) is specified, the device cannot be changed to a different device type.

(b) The object device with the specified offset device cannot be changed to the word specification for bit device.

(c) When the head device of the device which is automatically and consecutively set is changed, do not make the data length out of the device range.
The following operation occurs depending on the device data length.

- When the data length is 16 bits and the set device is out of the range, the device is not changed.
- When the data length is 32 bits and the set device is out of the range, the area out of the device range is not set for the device.

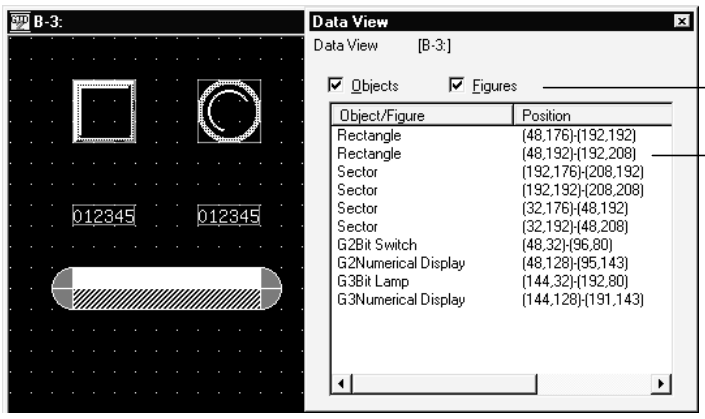
(2) Change of figure

(a) Change from a basic figure to a free figure and from a free figure to a basic figure is not allowed.

9.1.4 Simple selection of overlapped figure (Data view)

1 What is data view?

The data view displays all figures and objects arranged on the screen in a list.
The listed figures and objects can be double clicked and edited directly.



Check an item for display.

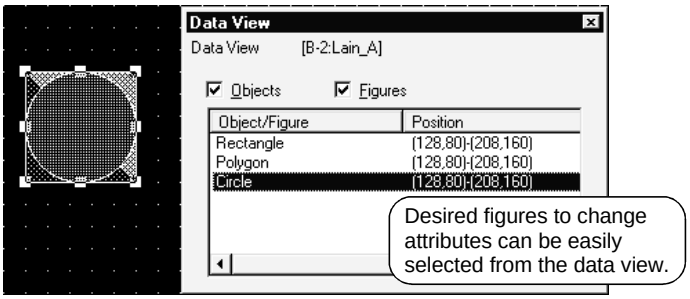
The name, coordinates and object ID (for objects only) of the selected figures and the objects are displayed.

When the figures/objects are selected, the corresponding objects on the screen are selected.

"G" is displayed before the name of a grouped figure.

2 Useful for cases below:

If multiple objects or figures are overlapped, desired figures or objects can be easily selected and edited.



3 Operation method

1. Select the [Tool] → [Data View] from the menu.
2. The data view is displayed.

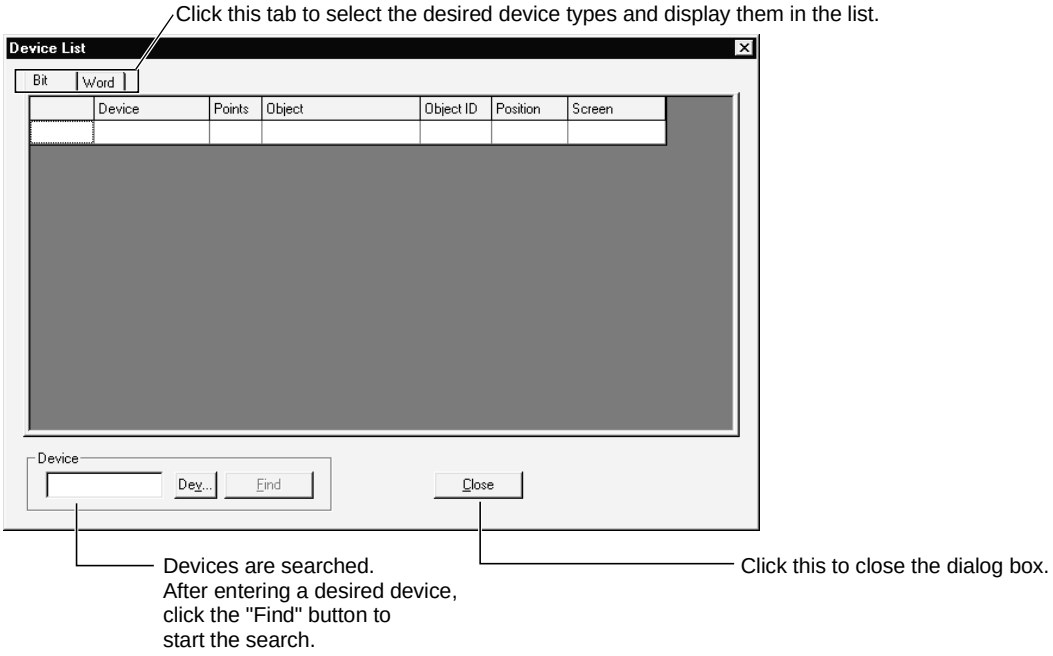
Hint! Limiting the number of objects or figures on the list

Select the desired objects/figures on the screen, and display the data view dialog box. Only the selected objects/figures are displayed in the data view.

9.1.5 Checking devices in use (Device list)

1 Device list

The device list displays the devices used for the editing screen or the entire project.



2 Useful for cases below:

The device list is useful to check devices used for the project/screen created.

3 Operation method

1. Select the [Tool] → [Device List] → [Screen/Project].
2. The device list is displayed. Check the devices in use.

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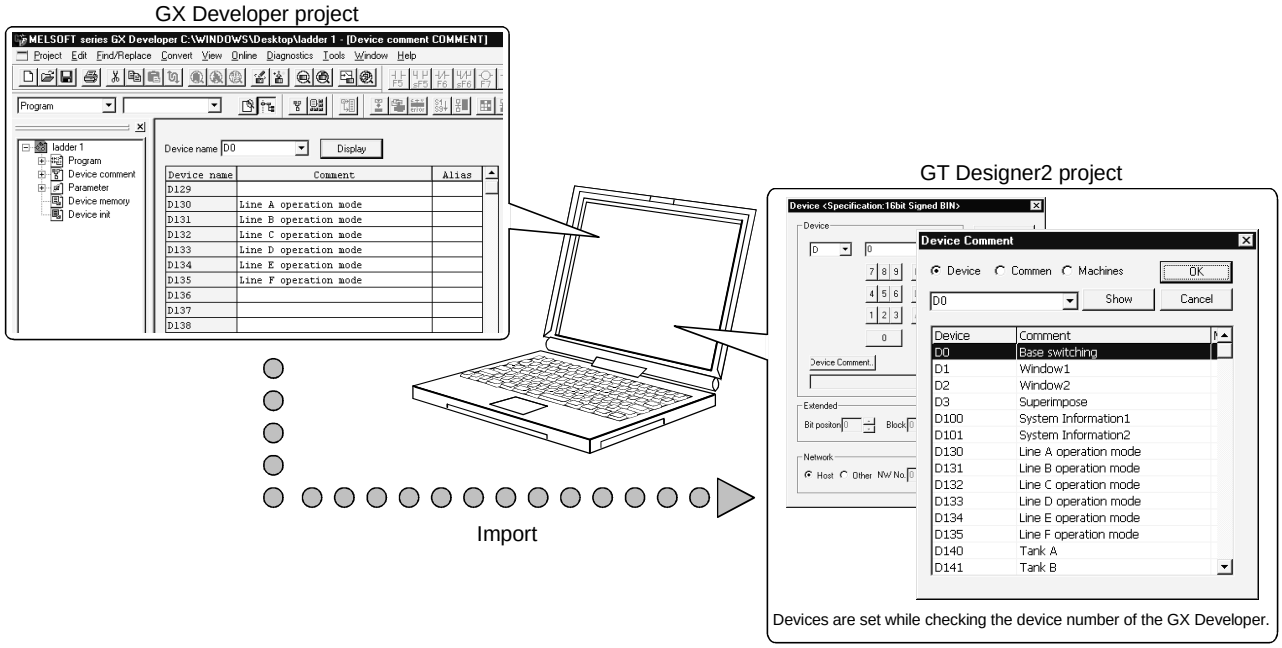
9.2 Referring to Device Comment When Setting Devices

The device comment and the device name created on the GX Developer can be checked when setting devices on the GT Designer2. Since devices can be set on the GT Designer2 while checking the devices used for the PLC program, errors in device number setting can be prevented. (Only for GOT-A900 Series)



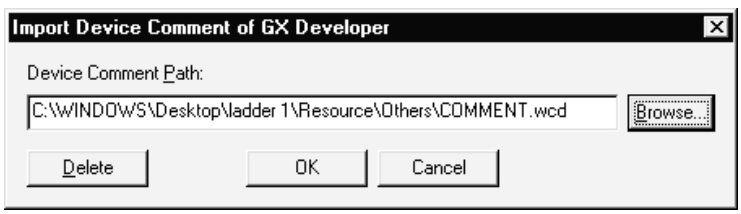
Point PC types available for the device comment check

The device comment of the GX Developer can be checked when the PC type is "MELSEC-A", "MELSEC-QnA, Q", "MELSEC-Q (Multi)" or "MELSEC-FX".

9.2.1 Importing device comment

Import the device comment of the GX Developer to the GT Designer2 in order to check the device on the GT Designer2.

1. Select the [Project] → [Import Device Comment of GX Developer] from the menu.
2. The "Import Device Comment of GX Developer" dialog box appears. Specify the device comment file in the project of the GX Developer.
   Click the OK button. Import of device comment is completed.



Clicking the Delete button of the "Import Device Comment of GX Developer" dialog box will delete the path of the current device comment data.

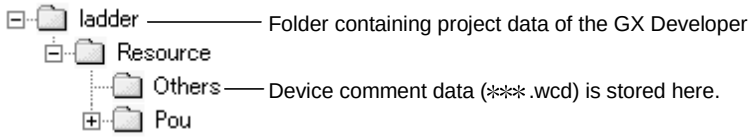
Point

(1) GX Developer data used for this function

Only the device comment data (∗∗∗.wcd) of the GX Developer is required for this function.
Other project data of the GX Developer is not required.

(2) Storage location of device comment data

The device comment data (∗∗∗.wcd) of the GX Developer is created in the project data of GX Developer.



(3) Modification of device comment on the GX Developer

If the device comment data (∗∗∗.wcd) once specified is edited on the GX Developer, it is not updated on the GT Designer2.
To update the edition, specify the device comment data (∗∗∗.wcd) again.

(4) Specified path

The path is stored after the GT Desiner2 is completed.

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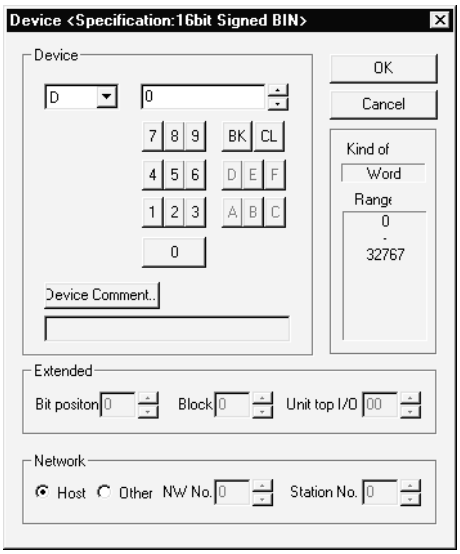
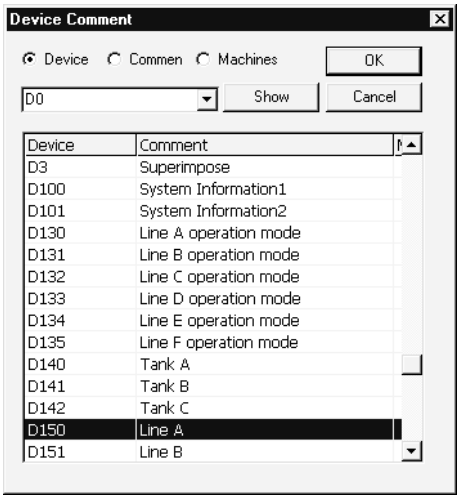
9.2.2 Check method of device comment

The check method of device comment is shown below:

1 Click the Device Comment... button in the device settings dialog box of each object.



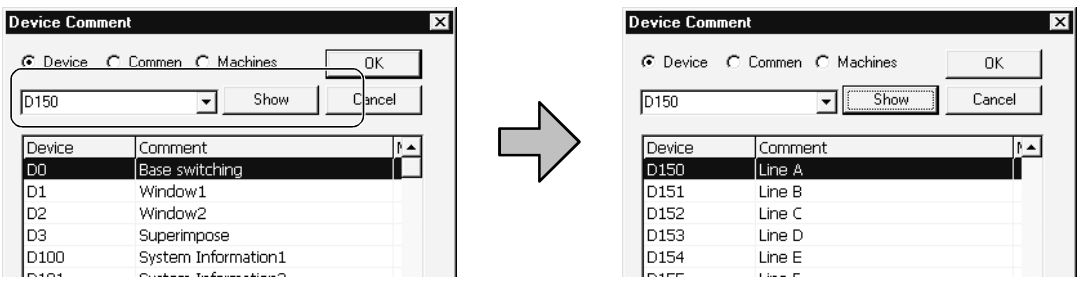
2 The device comment dialog box appears. A device can be set while checking the device comment. After setting, click the OK button.



In the device comment dialog box, device number, comments and device names can be used for search.

(Ex. 1) Search of device number

After entering a desired device number, click the Show button. The corresponding device is displayed at the top of the list.



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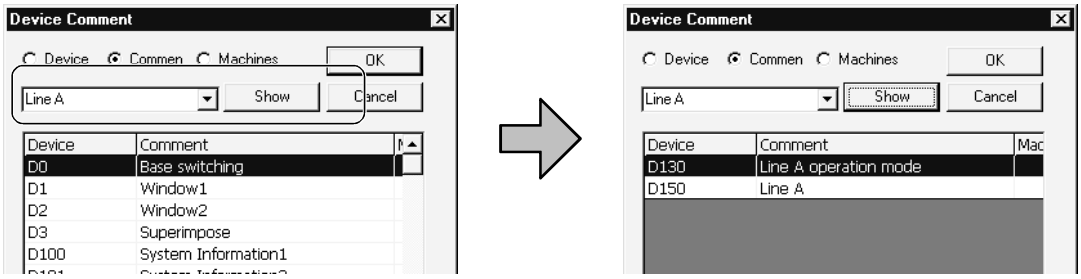
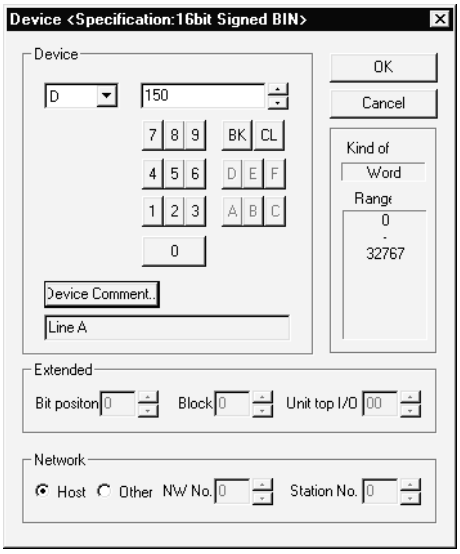
(Ex. 2) Search of comment/device name

Enter a desired keyword and click the Show button. The comment or the device name containing the entered keyword are displayed in the list.



3 The device comment dialog box is closed. The selected device is set in the device setting dialog box.



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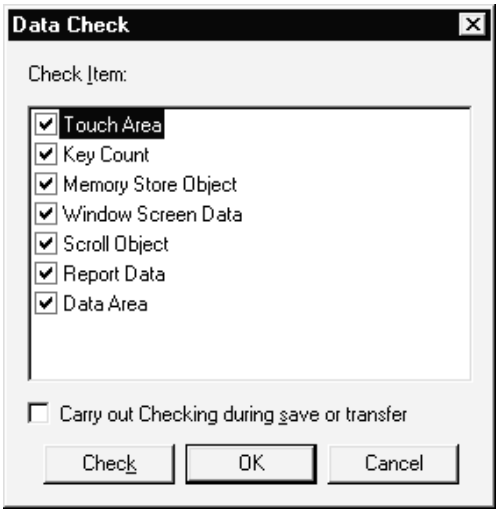
9.3 Checking Monitor Data for Errors

Details of the monitor screen data created on the GT Designer2 can be checked for errors.
For the checking method, see below:

☞Section 4.12 Data check operation



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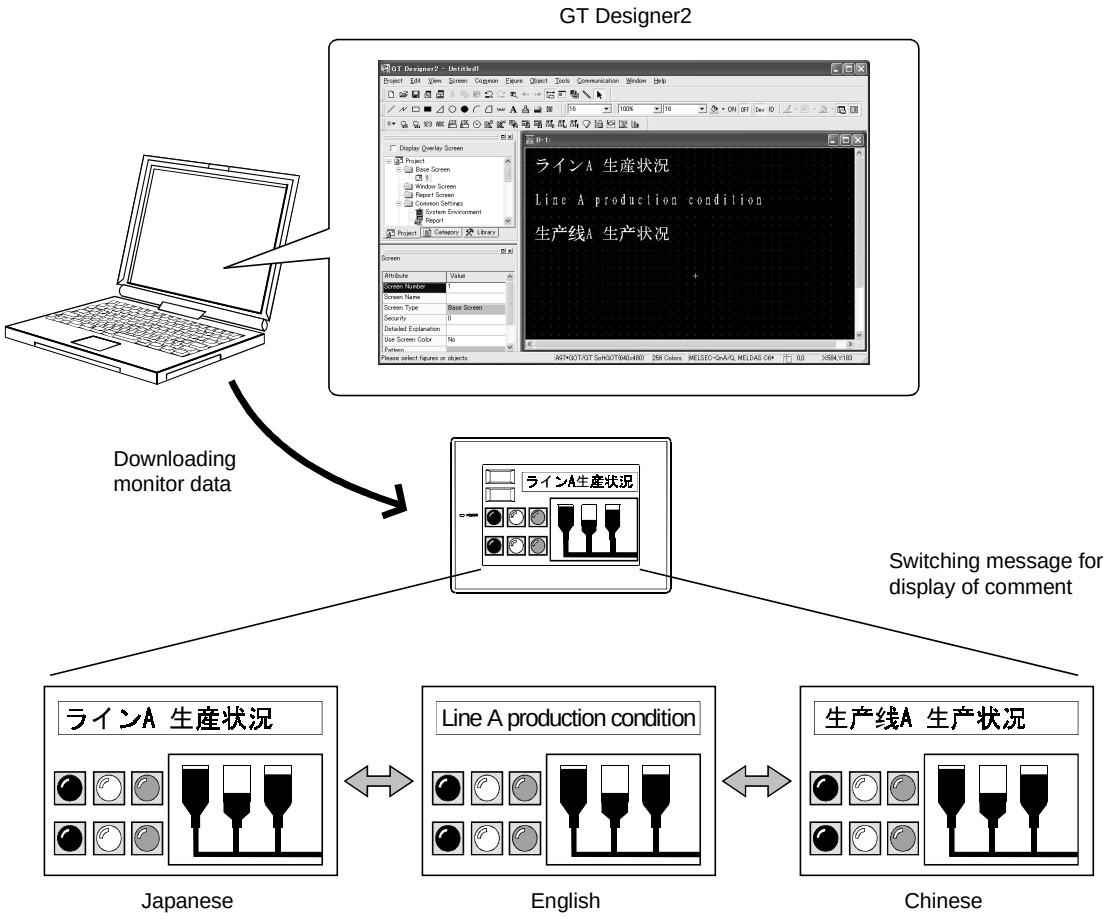
9.4 Inputting multiple language

With multiple language function in Windows, various languages can be input on the GT Designer2. One GOT can display a screen for various languages by inputting letters and comments in various languages. *1 (Language incompatible with Windows cannot be input.)



*1: In the GOT-F900 Series, only one lauguage (selected in "Character set") can be selected in one unit.

Point

OS (Windows®) that allows input of multiple languages

Multiple language input is available for the OS (Windows®) below:

- Windows® 2000 Professional
- Windows® XP Professional
- Windows® XP Home Edition

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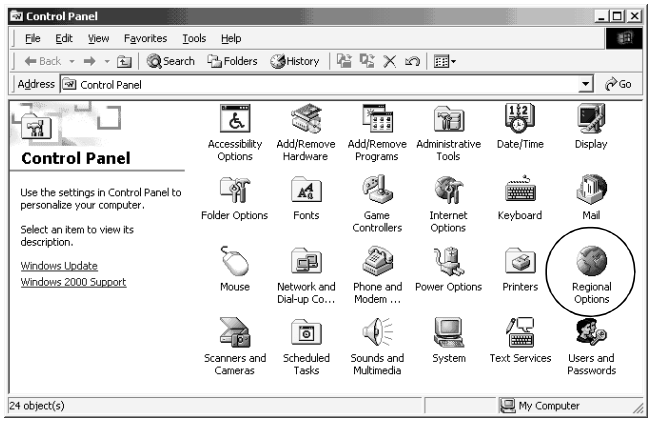
9.4.1 Input method

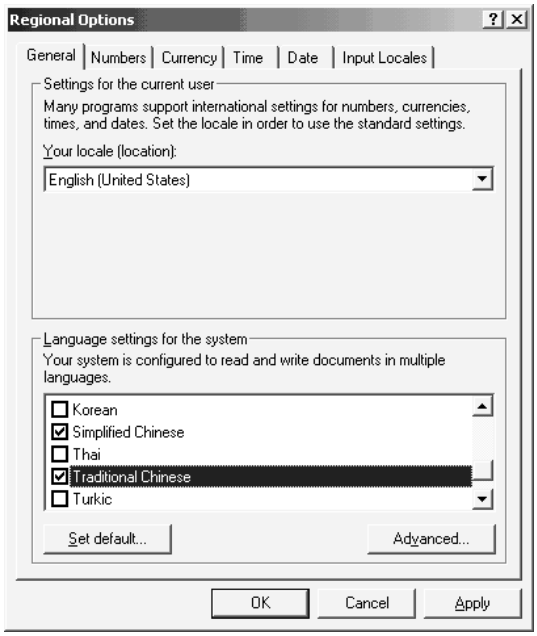
Procedures of inputting multiple languages are shown below:
Refer to manual/help of Windows for detailed operation method of Windows®.

1 Setting for each Windows

(1) Windows 2000® Professional



1 Select the [Start] → [Control panel] menu. Select "Regional Options".



2 The "Regional Options" dialog box appears. Select the General tab and select the desired language from the "Language setlings for the system".

*: The CD-ROM of Windows® 2000 is required.

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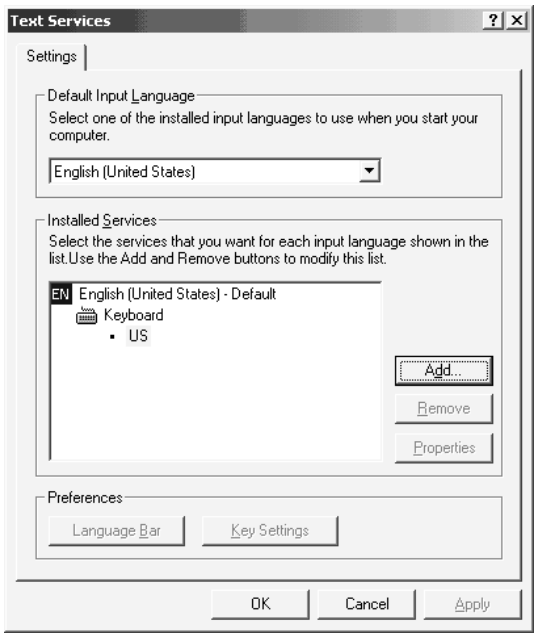
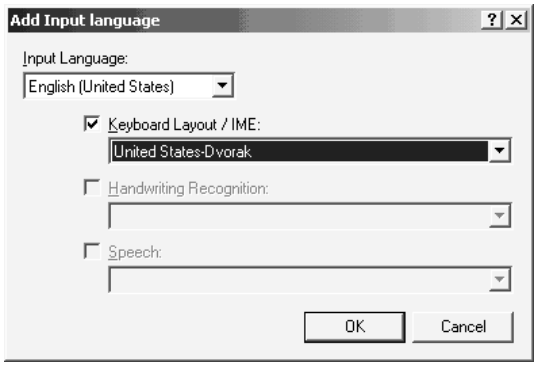
3 Select the Input Locale tab and click the Change button of "Input locales installed."



4 Click the Add button of "Installed Services."



5 The "Add Input Language" dialog box appears. Select the desired language. After selection, click the OK button.

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(2) Windows® XP Professional and Windows® XP Home Edition

1 Select the [Start] → [Control panel] menu. Select "Regional and Language Options."

Regional and Language Options
Regional Options
Languages
Advanced
Text services and input languages
To view or change the languages and methods you can use to enter text, click Details.
Details...
Supplemental language support
Most languages are installed by default. To install additional languages, select the appropriate check box below.
Install files for complex script and right-to-left languages (including Thai)
Install files for East Asian languages
OK
Cancel
Apply

2 The "Regional and Language Options" dialog box appears. Select the Language tab and Click the Details button of "Text services and input languages."

3 The "Regional and Language Options" dialog box appears.
Select the Language tab and Click the Add button of "Text services and input languages."

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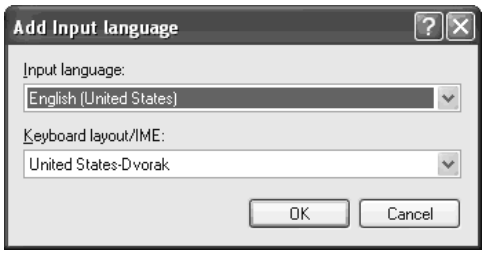
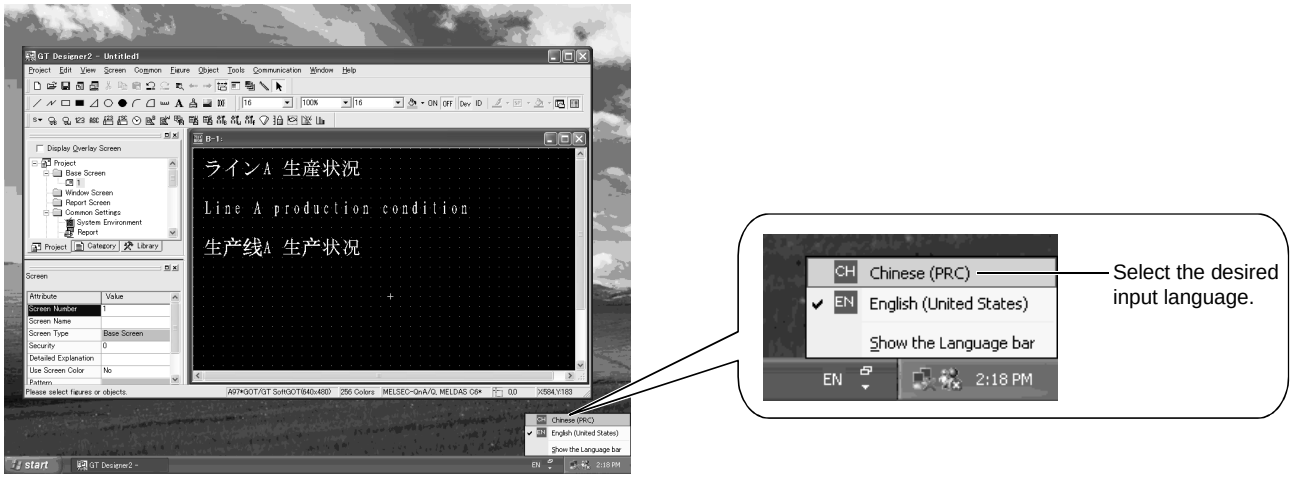


4 The "Add Input language" dialog box appears. Select the desired language. After selection, click the OK button.

2 Input method

Click the language selection icon on the task bar at the lower right of the screen and select the desired input language. After selection, multiple languages can be input on the GT Designer2.

Ex.) Windows® XP Professional



9.4.2 Precautions

1 Use of multiple language input system software (Chinese Writer, Korean Writer)

The Chinese Writer and the Korean Writer which were used on the GT Designer cannot be used on the GT Designer2. (Chinese Writer and Korean Writer are trademark of Kodensha.)

2 Precautions for printing

When "Output to file" is executed at the time of printing, only the language supported by the used OS (Windows®) as standard can be output.

3 Import/export of comments input in multiple languages

When comments input in multiple languages are imported/exported, use the Unicode text file format If a normal text file or CSV file is sued, the letters may be garbled.

Refer to the manual below for import/export of comments:

☞ GT Designer2 Version1 Reference Manual

4 Drawing monitor data created in multiple languages on other OS (Windows) than Windows 2000 Professional/Windows XP Professional/Windows XP Home Edition

(1) Precautions for editing

Do not edit settings (comment or letter) that have the input language not supported by the OS (Windows). The characters may be garbled.

(2) Display on workspace, property sheet and dialog

Multiple languages on the workspace, property sheet and dialog are garbled. If the display on the GT Designer2 is correct, it is correctly displayed on the GOT.

5 When using the GOT-F900 Series

(1) Two or more languages cannot be displayed.

In the GOT-F900, only one language selected in “Character Set” can be displayed on all screens.

It is impossible to display two or more languages on one screen or to display a different language on a different screen.

If an unselected language is displayed, irregular characters are displayed.

(2) Cautions on fonts built in the GOT

Built-in fonts (languages) vary depending on the GOT-F900 model.

Select a model supporting the language to be used.

Example: When Chinese is to be displayed in the F930GOT

Select the F930GOT-BWD-C.

For the details of built-in fonts, refer to the GOT-F900 SERIES HARDWARE MANUAL [COMMON CONNECTION] or the GOT-F900 SERIES OPERATION MANUAL [GT Designer2 Version1].

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9.5 Confirming the created data size

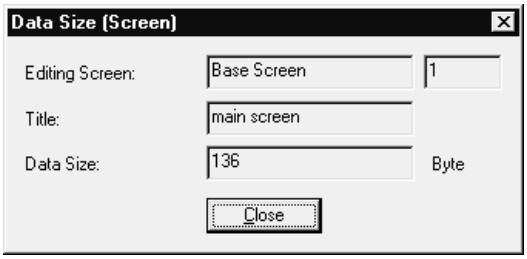
Before transferring the monitor data created using GT Designer2 to the GOT, data size can be confirmed for each screen or project.

9.5.1 Confirmation method

1. Select [Tool] → [Data Size] → [Screen]/[Project] menu.
2. The data size dialog box appears. Confirm the data size.

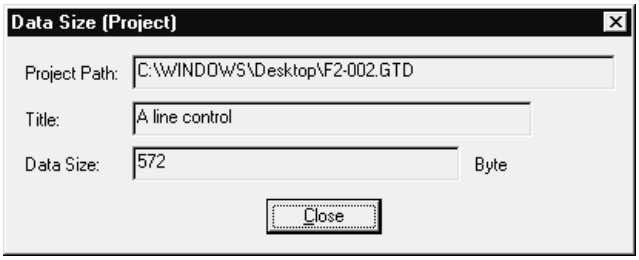
9.5.2 Confirmation items

1 Screen



Item	Description	A	F
Editing Screen	The editing screen type and screen No. are displayed	○	○
Title	The screen title is displayed.	○	○
Data Size	The screen data size is displayed.	○	○

2 Project



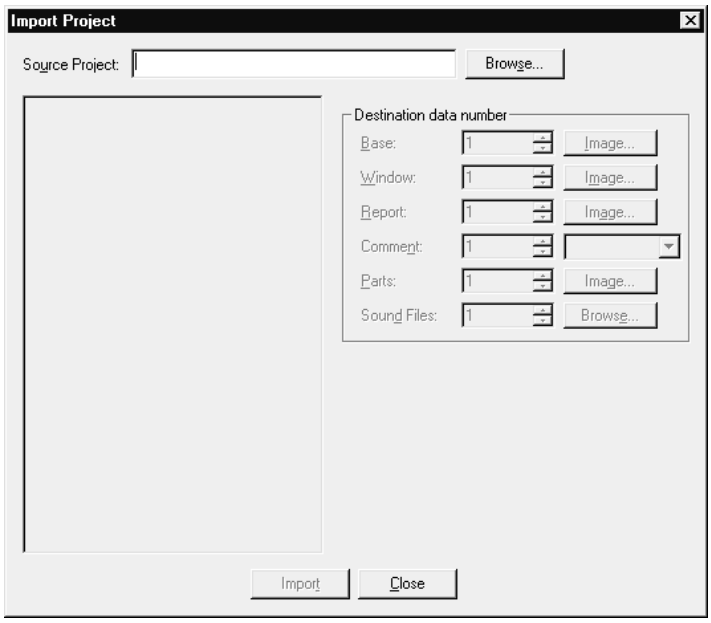
Item	Description	A	F
Project Path	The path for the editing project is displayed.	○	○
Title	The project title is displayed.	○	○
Data Size	The project data size is displayed.	○	○

9.6 Utilizing other project data

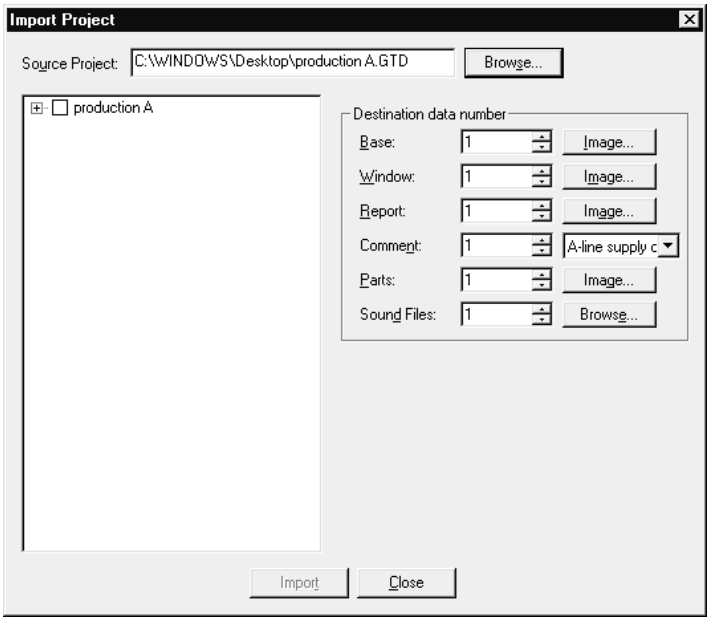
It is possible to utilize other project data, i.e., import other project data (Source project) into the currently edited project (Destination data).
This function is effective when utilizing multiple project data.
It supports GT Designer data as well.

9.6.1 Importing data

1. Select [Project] – [Import Project] from the menu.
2. The Import Project dialog box appears.



3. Click the [Browse] button and select a project to be imported, i.e., source project (or directly enter the path).
   After the selection, the project data is displayed in tree format.



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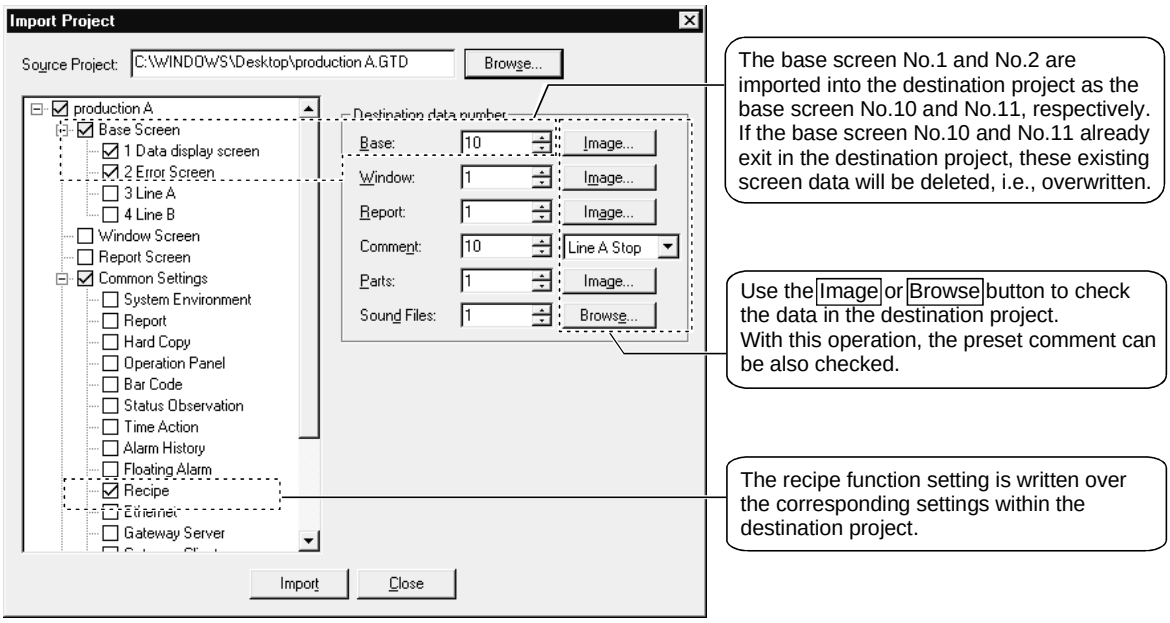
4 When selecting screen, parts or sound data for utilization, set it the No. to be used in the destination project. (When selecting multiple data, set the head No.)
If the data of the same No. already exists in the destination project, the existing data will be deleted, i.e., overwritten. (Use the Image or Browse button to check the data in the destination project.)
All common settings will be overwritten.


Import Project
Source Project: C:\WINDOWS\Desktop\production A.GTD
Browse...
production A
Base Screen
1 Data display screen
2 Error Screen
3 Line A
4 Line B
Window Screen
Report Screen
Common Settings
System Environment
Report
Hard Copy
Operation Panel
Bar Code
Status Observation
Time Action
Alarm History
Floating Alarm
Recipe
Ethernet
Gateway Server
Destination data number
Base: 10 Image...
Window: 1 Image...
Report: 1 Image...
Comment: 10 Line A Stop
Parts: 1 Image...
Sound Files: 1 Browse...
Import
Close
The base screen No.1 and No.2 are imported into the destination project as the base screen No.10 and No.11, respectively. If the base screen No.10 and No.11 already exit in the destination project, these existing screen data will be deleted, i.e., overwritten.
Use the Image or Browse button to check the data in the destination project. With this operation, the preset comment can be also checked.
The recipe function setting is written over the corresponding settings within the destination project.

5 Click the Import button to import the selected data.

6 After the data import is completed, confirm the imported data and the relevant settings.

9.6.2 Cautions

1 If the GOT type or PLC type set for the source project differs from that for the destination project.

(1) If the GOT type set for the source project differs from that for the destination project, the GOT type of the imported data is changed to the one set for the destination project.
With this import, some functions may be deleted due to the GOT type incompatibility.

(2) If the PLC type set for the source project differs from that for the destination project, the PLC type of the imported data is changed to the one set for the destination project.
GT Desginer2 may delete some devices, as the device type is incompatible or they are out of the applicable setting range.
Make the device settings as necessary.

Hint!

Hold the incompatible devices

The incompatible devices, i.e., devices to be deleted after the data import (described in (2) above), can be held by executing the following.

1 Change the PLC type set for the source project to the one for the destination project.

2 Check for the objects converted to “??” in the device list. (The incompatible devices are converted to “??”.)

3 Make the settings of the devices for the objects converted to “??”.

4 Save the modified source project. Then, open the destination project, and execute the series of operations for [Import project], i.e., utilizing other project data.

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2 Incompatible data

(1) The GT Designer2 cannot import the data of functions, if the functions are unsupported by the GOT type of the destination project.

(2) If the monitor data is imported using the GT Designer2 version that is older than the one used to create the source project, some functions or settings may be deleted.
To import the relevant data, make sure to use the GT Designer2 version that is the same or newer than the one used to create the source project.
For the compatibility between monitor data and GT Designer2 version, refer to the following.

☞ Appendix 4 Applicable Monitor Data

(3) The GT Desginer2 cannot import the data of the following common settings.
Therefore, make the settings again in the destination project.

- [System Settings] and [Project Title] within [System Environment]
- [Script]

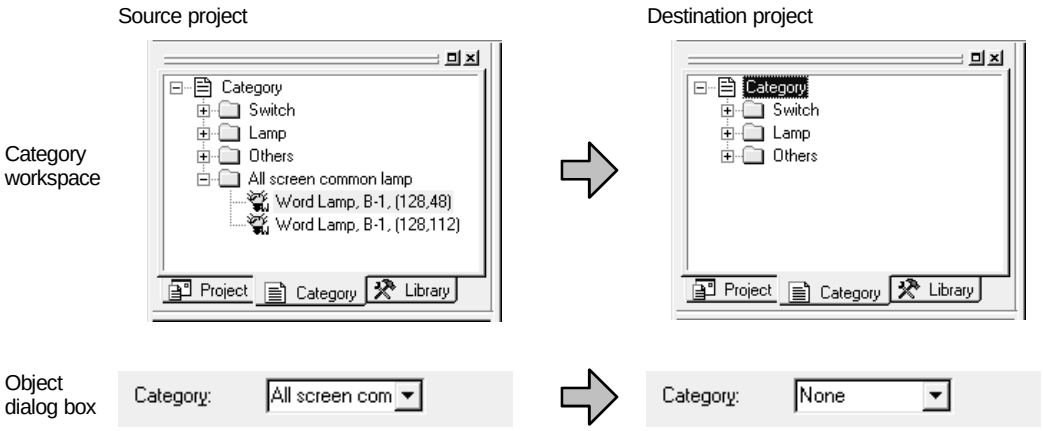
Hint!

Make the settings again

Start two GT Designer2 windows. Open the source project on the one window, and the destination project on the other window, and make the settings by comparing the two project settings.

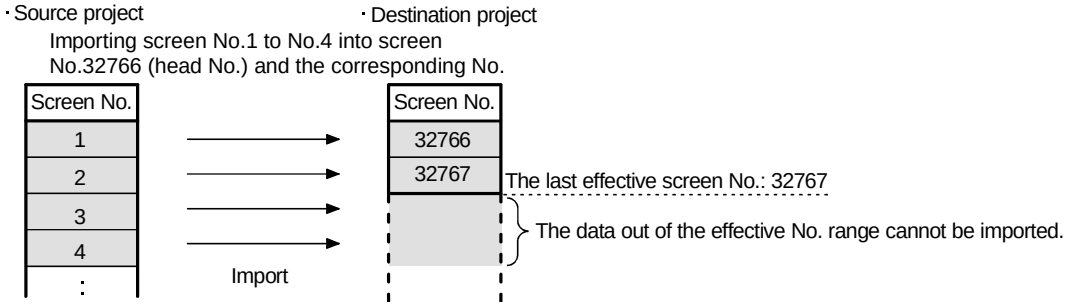
(4) When the object data is imported to the project in which the corresponding category is not set, the object will be registered within the [None] category, even if the category has been set in the source project.
To set the category, create the same category within the destination project, in advance or after the data import.

(Example) When the data in the "All Screen Common Lamp" category is imported.



(5) When a data import is executed based on the setting so that the data No. to be assigned will exceed the effective No. range, the data out of the No. range cannot be imported.

(Example) When importing base screen data



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(6) When the [System Environment] setting window is opened on the destination project, [System Environment] cannot be selected. (Not displayed in the tree structure.)
When importing the [System environment] setting, close the [System Environment] setting window on the destination project, and then select the project to be imported.

(7) Depending on the file formats of the source project and destination project, the [Import project] function cannot be executed.
The following table shows the file compatibility between the source project and destination project.

●: Compatible –: Incompatible

Destination project	Source project		
	***. GTD file (GT Designer2 file)	***.DUP file (DU-WIN file)	***.GOT file (GT Designer file)
GT Designer2 ∗1	●	-	●
GT Designer2 (DU-WIN format) ∗2	-	●	-

∗1: The newly created project or the project edited by using the GTD/GOT file.

∗2: The project edited by using the DU-WIN file.
This file project remains GT Designer2 (DU-WIN format) project; cannot be changed to GTD file even when an attempt is made to save it as GTD file.

3 Status observation function

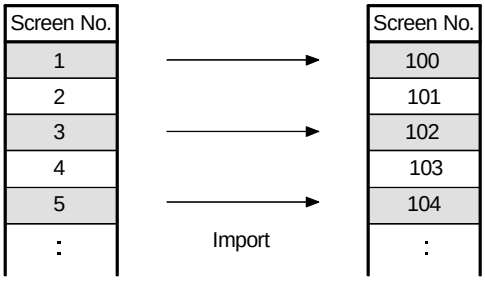
The base status observation function cannot be imported from the common settings.
Import the screen data that includes the setting.
The project status observation function can be imported from the common settings.

4 Other cautions.

When selecting multiple screen No., they will be imported into the screen No. at the same intervals as before the import.

・Source project ・Destination project

Importing screen No.1, 3, 5 into screen No.100 (head No.) and the corresponding No.



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APPENDIX

Appendix 1 List of Shortcut Keys

Item			Shortcut keys	A	F
[Project (P)]		New Screen (N)	Ctrl+N	○	○
		Open (O)...	Ctrl+O	○	○
		Save (S)	Ctrl+S	○	○
		Print (P)...	Ctrl+P	○	○
		Exit (X)	Alt+F4	○	○
[Edit (E)]		Undo (U)	Ctrl+Z	○	○
		Redo (R)	Ctrl+Y	○	○
		Cut (T)	Ctrl+X	○	○
		Copy (C)	Ctrl+C	○	○
		Paste (S)	Ctrl+V	○	○
		Delete (D)	DEL	○	○
		Select All (S)	Ctrl+A	○	○
		Group (G)	Ctrl+G	○	○
		Ungroup (N)	Ctrl+U	○	○
		Flip Vertical (V)	Ctrl+J	○	×
		Flip Horizontal (H)	Ctrl+H	○	×
		Rotate Left (L)	Ctrl+L	○	×
		Rotate Right (R)	Ctrl+R	○	×
		Bring to Front (B)	Ctrl+F	○	○
		Send to Back (K)	Ctrl+B	○	○
		Attribute (E)...	Alt+Enter	○	○
[View (V)]		Preview (P)	Ctrl+I	○	○
		Workspace (W)	Alt+0	○	○
		Property sheet (E)	Alt+1	○	○
		Redisplay	F5	○	○
[Screen (S)]		Close (C)	Ctrl+W	○	○

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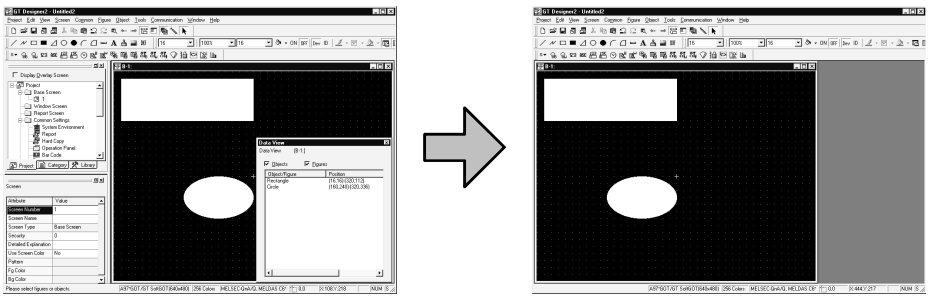
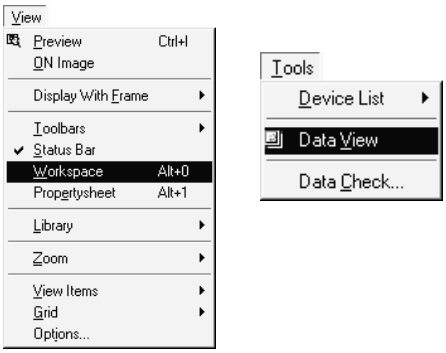
Appendix 2 Q&A of GT Designer2 Operation

Q&A for GT Desinger2 operation is described below:

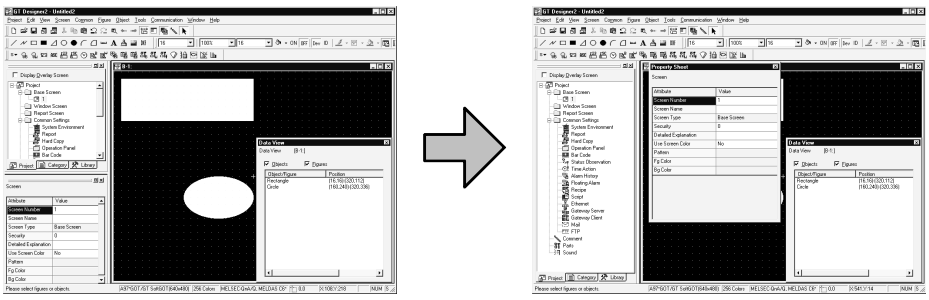
Q1. The workspace/property sheet/data view has disappeared from the screen. How can it be displayed?



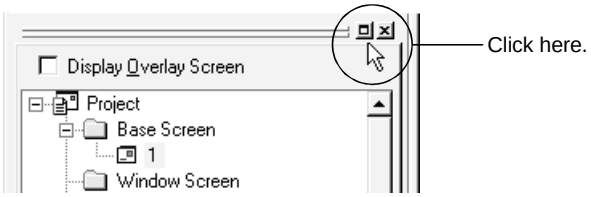
A1. Select [View] → [Workspace/property sheet] to display the workspace and the property sheet.
Select [Tools] → [Data View] to display the data view.



Q2. I don't know how to pop up the property sheet or the data view.



A2. Click at the upper right to pop up the property sheet or the data view.



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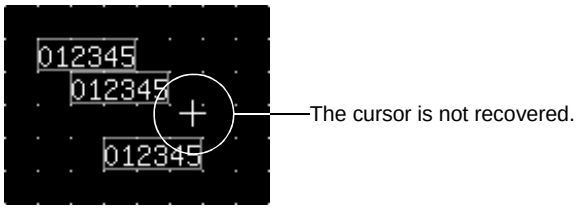
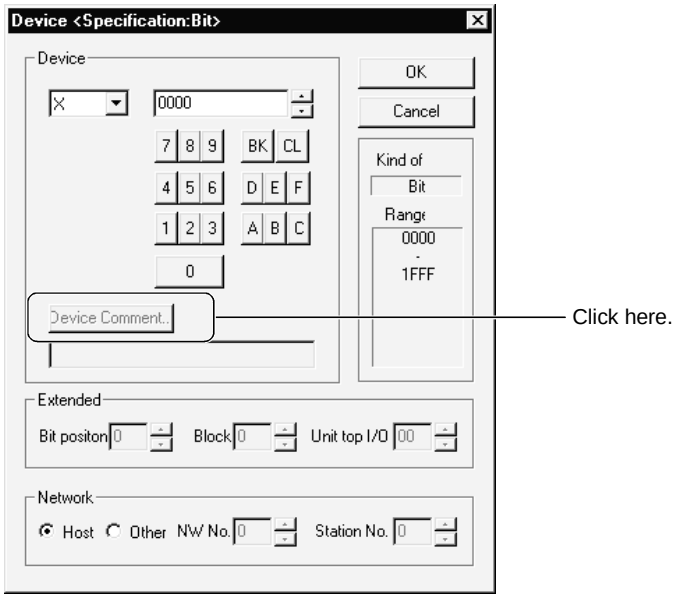
Q3. The cursor remains to be + mark. Objects are continuously arranged. How can the cursor be recovered?



A3. After arrangement of an object, right click the mouse or press the Esc key on the keyboard to recover the cursor to ↖. To maintain the cursor to an arrow mark, select [Project] → [Preferences] and check "Tool de-select after use" on the operation tab.

Q4. The device comment cannot be selected in device setting.

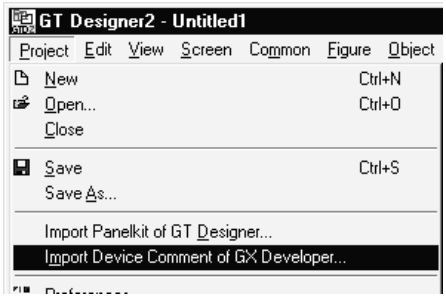


A4. To select the device comment, the comment data of the GX Developer needs to be imported into the GT Desinger2.

Before setting the device, select [Project] → [Import Device Comment of GX Developer] and select the project of the GX Developer to be imported.

Refer to the following for the device comment reference of the GX Developer.

☞ Section 9.2 Referring to device comment for device setting



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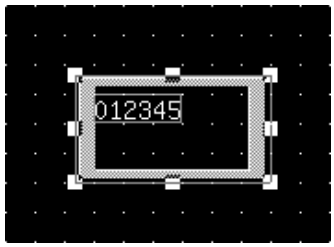
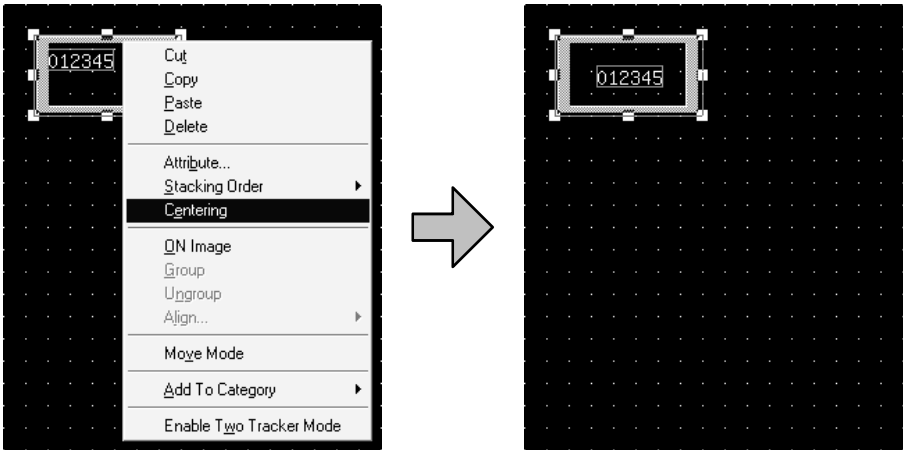
Q5. Object figure is not accurately arranged.



A5. Right click the mouse on the object and select [Enable Two Tracker Mode] and [Centering]. The object is then accurately arranged.
When Centering is selected, the object is automatically moved to the center of the figure.
When Enable Two Tracker Mode is selected, the object and the figure are independently moved, enlarged or reduced. The arrangement position of the object and the figure can be finely adjusted. (When the touch switch is set, the valid area of the touch switch can be set.)



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Appendix 3 Using Existing Data

Appendix 3.1 Outline procedures

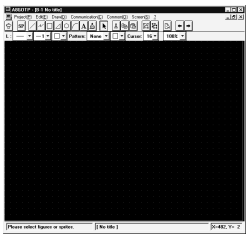
The outline procedures for converting the existing data to the GT Designer2 data are shown below.

- Monitor data for A64GOT
- Monitor data for A77GOT

- Monitor data for GOT800 Series
- Digital's Package Data

- Monitor data created by GT Designer or DU/WIN

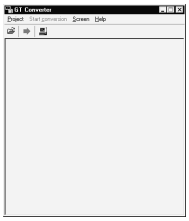
SW3NIW-A8GOTP
(Drawing software for GOT800 Series)



The monitor data of the A64GOT/A77GOT are read out and saved as monitor data of the GOT800 Series.

☞ SW3NIW-A8GOT Graphic Settings Software Package Operating Manual (Monitor Screen Creation Manual)

GT Converter

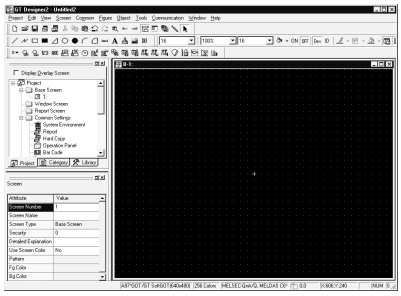


The monitor data of the GOT800 Series or the Digital's package data are converted to the monitor data of the GT Designer.

☞ Help function of GT Converter

<It is contained in the CD-ROM of the GT Designer2.>

GT Designer2



The monitor data of the GT Designer or DU/WIN are read out with the GT Designer2. The read data is saved as the GT Designer2 data.
(It cannot be saved as the GT Designer or DU/WIN format file.)
Refer to the following for reading or saving method.

☞ Section 4.3.1 Opening project

☞ Section 4.13.2 Saving as project name

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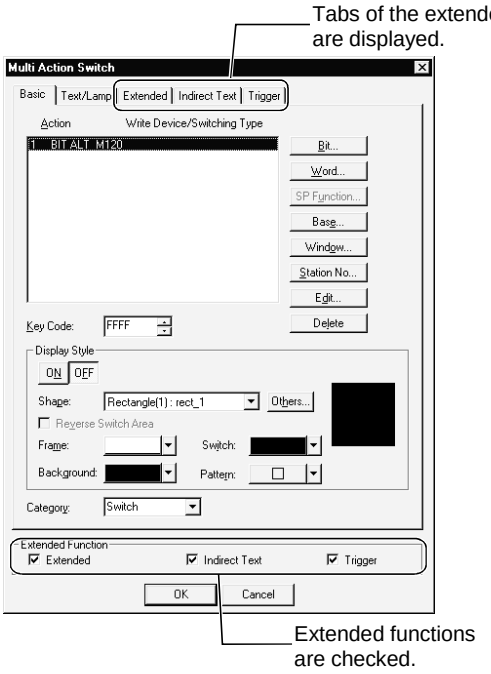
Appendix 3.2 Precautions

1 Using the GT Designer monitor data

(1) The object setting dialog box is displayed with all extended functions selected.

Ex.) When setting the touch switch



(2) Switch-grouped objects on the GT Designer are treated as normally grouped objects on the GT Designer2.

(3) "Category" shows "none" (Category none).

Point Opening monitor screen data with GT Designer2

The monitor screen data which are opened with the GT Designer2 cannot be saved as a GT Designer format file.

2 Using monitor data of GOT800 Series

Action of the GOT800 Series may be different from that of the GOT900 Series for some functions. Use of the GOT800 compatible mode can change the functions with different actions to actions of the GOT800 Series.

☞ This Section: (1) GOT800 compatible mode

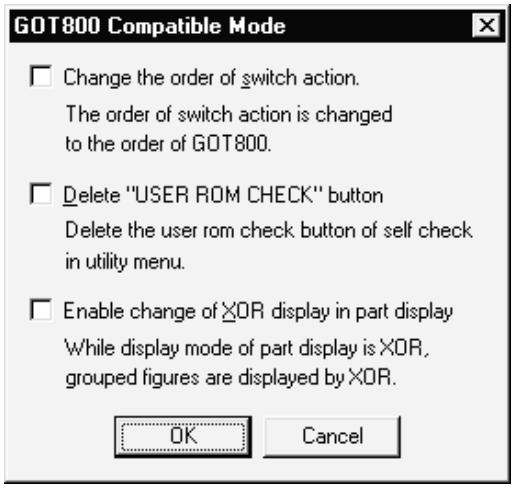
For functions that have no compatibility with the GOT800 compatible mode, a user should change the sequence program or the monitor data.

☞ This Section: (2) Different actions of functions between GOT800 Series and GOT900 Series, and corrective actions

(1) GOT800 compatible mode

1 Select the [Common] → [GOT800 Compatible Mode] from the menu.

2 The setting dialog box appears. Refer to the following descriptions for setting.


GOT800 Compatible Mode
Change the order of switch action.
The order of switch action is changed to the order of GOT800.
Delete "USER ROM CHECK" button
Delete the user rom check button of self check in utility menu.
Enable change of XOR display in part display
While display mode of part display is XOR, grouped figures are displayed by XOR.
OK
Cancel

Item	Description	A	F
Change the order of switch action	Priority of duplicate setting for the touch switch is changed to priority of the GOT800 Series.	○	×
Delete USER ROM CHECK button	The user check area of the GOT (utility self-diagnosis) is deleted.	○	×
Enable change of XOR display in part display	When the XOR display is set in display mode of the part display function, grouped figures are XORed at a time and displayed.	○	×

Remark [Delete "USER ROM CHECK" button]

When the user area is checked on the GOT, the monitor data in the GOT is deleted. Deletion of the user area check can prevent deletion of the monitor data by incorrect operation by a user.

(2) Different actions of functions between GOT800 Series and GOT900 Series, and corrective actions

<table>
<tr><th>Item</th><th>Description</th><th>Procedures to replace the GOT800 Series with the GOT-A900 Series</th></tr>
<tr><td rowspan="3">Part Display</td><td>When you have selected [Display mode] - [XOR display], the parts that group overlapping figures are displayed as follows:
GT800 Series : All grouped figures are displayed at once, when using XOR-display.
GOT-A900 Series: Each in the grouped figures is displayed one at a time in the overlapping order, when using XOR-display.</td><td rowspan="2">With the GOT800 Compatible mode, no action is required.</td></tr>
<tr><td>When you create data by setting the same line color and pattern color with pattern type 8 (fill) after selecting [Display mode] - [XOR display] in the GOT800 Series and then convert it into the GOT-A900 Series, the outside of that data part is displayed one dot smaller.</td></tr>
<tr><td>When you create data by selecting [Display mode] - [XOR display] in the GOT800 Series (16-color models) and then display it with the GOT-A900 Series (16-color models), the overlapped data area is displayed dark. (For that data, the display colors are matched with those of a 256-color model in the GOT-A900 Series.)

<Example>
<table><tr><th>GOT used</th><th>Color of figure</th><th>Color of part</th><th>Color of overlapped areas</th></tr><tr><td>GOT800 (16 colors)</td><td>Blue</td><td>White</td><td>Yellow</td></tr><tr><td>GOT-A900 (16 colors)</td><td>Blue</td><td>White</td><td>Dark yellow</td></tr><tr><td>GOT-A900 (256 colors)</td><td>Blue</td><td>White</td><td>Yellow</td></tr></table></td><td>It is not always necessary to change the settings of the colors. You can lighten the dark overlapped area by setting the product's color darker. (Either the color of a part or an overlapped area will always have a dark color.)

<In the case of the example at left>
<table><tr><th>GOT used</th><th>Color of figure</th><th>Color of part</th><th>Color of overlapped areas</th></tr><tr><td>GOT900 (16 colors)</td><td>Blue</td><td>Dark white</td><td>Yellow</td></tr></table></td></tr>
<tr><td>Part Movement</td><td>If the device value becomes a negative numeric value or out of the display range, the data created by setting [Indirect] for [Parts indication] using the "Part movement" function of the GOT800 Series is displayed as follows:
GOT800 Series : Parts are not displayed.
GOT-A900 Series: Parts are displayed.</td><td>No problem will occur unless you have set [Indirect] using the "Part movement" function.
In addition, there is no problem to set [Indirect] unless the device value becomes a negative numeric value or out of the [Display range].
If the device value becomes a negative numeric value or out of the [Display range] range, set the part number to "0" and out of the [Display range].
(Setting the [Display part] number to "0" hides parts.)</td></tr>
<tr><td>Touch Switch</td><td>The priority varies depending on the GOT when duplicate touch keys have been set.
GOT800 Series : Word SET → Bit SET
GOT-A900 Series: Bit SET → Word SET</td><td>With the GOT800 Compatible mode, no action is required.</td></tr>
</table>

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Item	Description	Procedures to replace the GOT800 Series with the GOT-A900 Series
System information [Before/after change]	The values of system information before and after changes vary depending on the GOT, when you enter a negative value via 16-bit signed BIN numeric value input. Example: Value before numeric value input: -1 Value for numeric value input : -2 <System information of the GOT800 Series> Value before change: 0X0000FFFF Value after change : 0X0000FFFE <System information of the GOT-A900 Series> Value before change: 0XFFFFFFFF Value after change : 0XFFFFFFFE	No problem will occur unless you enter a negative value via 16-bit signed BIN numeric value input. In addition, there is no problem if the GOT references sequence programs using a negative value before changing the system information as 16 bits. When the GOT references sequence program using the value before changing the system information as 32 bite, extract the lower 16 bits and then reference.
System information [Automatic Screen Saver Disable Signal (b0), Forced Screen Saver Enable Signal (b1)]	In the GOT-A900 Series, the operation of b1 (forced screen saver enable signal) takes precedence of the operation of b0 (automatic screen saver disable signal). This may cause some GOTs to work differently if both b0 and b1 are turned on. <If both b0 and b1 are turned on> GOT800 Series: The display and backlight are both turned off by the screen saver. GOT-A900 Series: The display and backlight both remain on.	You should change the sequence programs, etc. if the forced screen saver enable signal (b1) and the automatic screen saver disable signal (b0) turn on/off the backlight.

3 When diverting the monitor data of the DU/WIN

(1) Only screen data files of the GOT-F900 Series can be read.

(2) Some functions are equivalent to those on the dialog box of the DU/WIN.
For the details, refer to the GOT-F900 SERIES OPERATION MANUAL (GT Designer2 Version1).

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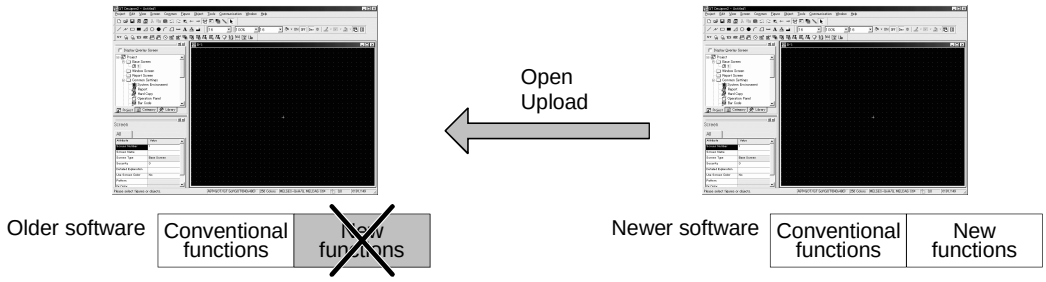
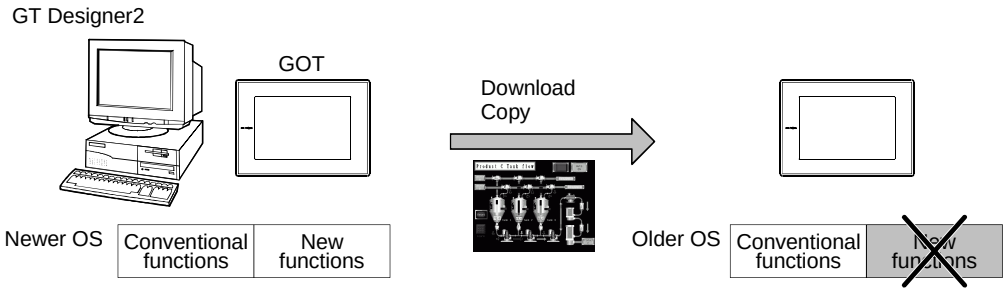
Appendix 4 Applicable Monitor Data

This section provides the precautions for using monitor data.
Pay attention to the precautions outlined in this section when handling monitor data.

1 When opening/uploading monitor data, make sure to use the same or newer GT Designer2 than the one used to create the monitor data.
When the older GT Designer2 is used, some problems may occur such as file is not able to be opened and/or some functions/settings are invalid.



2 When downloading/copying monitor data into a GOT, make sure that the OS version in the target GOT is the same or newer than the one in the source GOT/software.
If the OS in the target GOT is older, some functions (unsupported by the OS) are invalid.



The following shows the points to be check by the subject when using monitor data.

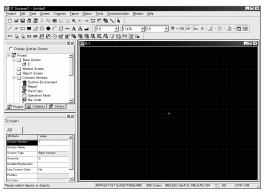
This section provides the cautions on the software version compatibility only.
When using functions depending on the GOT ROM_BIOS, the corresponding ROM_BIOS version must be installed in the GOT.
For ROM_BIOS-dependant functions, refer to the following.

5.1.1 1 ROM_BIOS

Appendix 4.1 Opening monitor data

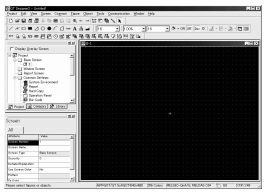
1 POINT

No problem occurs when the software version is the same or newer than the one used to create the monitor data.



GT Designer2 version used to open the data

≧



GT Designer2 version used to create the data

2 Precautions

When the monitor data is opened with the same or older software version than the one used to create it, some functions/ settings are invalid due to version incompatibility.

The following table shows the compatibility between the software versions.

Software used to open monitor data		Software used to create monitor data		
		GT Designer2	GT Designer	
		Version1	Version5.13P or later	Version1.00A to Version5.10L
GT Designer2	Version1	●	●	●
GT Designer	Version5.13P or later	-	▲	▲
	Version1.00A to Version5.10L	-	△	△

● : Compatible.

▲ : When opening the monitor data by older version software, some functions/settings are invalid.
(Warning message will appear when the data is opened.)

△ : When opening the monitor data by older version software, some functions/settings are invalid and also data is corrupted.
(Warning message will not appear when the data is opened.)

- : GT Designer cannot open the GT Desinger2 format files.

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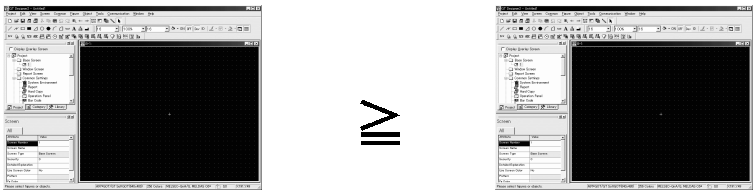
Appendix 4.2 Uploading monitor data

1 POINT

No problem occurs when the software version is the same or newer than the one used to download the monitor data into the GOT.



GT Designer2 version used to upload the data ≧ GT Designer2 version used to download the data

2 Precautions

When the monitor data is uploaded with the same or older software version than the one used to download it, some functions/settings are invalid due to version incompatibility.
The following table shows the compatibility between the software versions.

Software used to upload monitor data		Software used to download monitor data		
		GT Designer2	GT Designer	
		Version1	Version5.13P or later	Version1.00A to Version5.10L
GT Designer2	Version1	●	●	●
GT Designer	Version5.13P or later	▲ *1	▲*2	●
	Version1.00A to Version5.10L	△	△	△

● : Compatible.

▲ : When uploading the monitor data by older version software, some functions/settings are invalid.
*1: Warning message will appear regardless of whether the data includes the settings of unsupported functions.
*2: Warning message will appear only when the data includes the settings of unsupported functions.

△ : When opening the monitor data by older version software, some functions/settings are invalid, and also the data is corrupted.(Warning message will not appear when the data is opened.)

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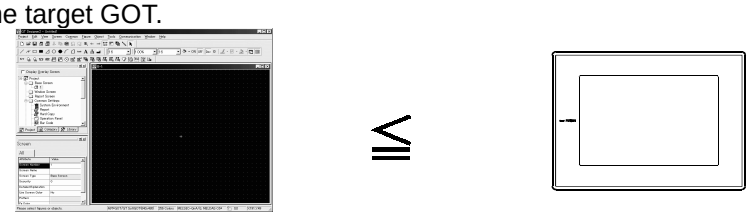
Appendix 4.3 Downloading monitor data

1 POINT

No problem occurs when the OS version of created monitor data is the same or older than the one installed in the target GOT.



OS of created monitor data ≦ OS installed in the target GOT

2 Precautions

When the monitor data is downloaded using the software with the same or newer OS version installed in the GOT, some functions/settings are invalid due to OS incompatibility.

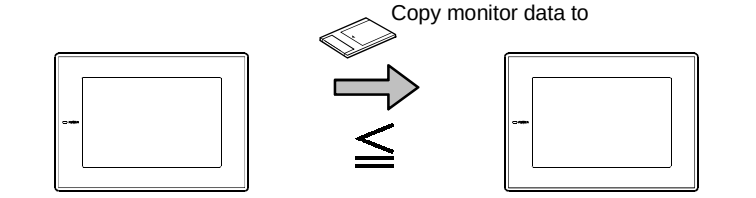
3 Solution

It is recommended to reinstall the latest OS. (The OS version installed in GOT can be checked within the utility (internal memory information.)

Appendix 4.4 Copying monitor data from one GOT unit to other unit with a PC card

1 POINT

No problem occurs when the OS version in the target GOT is the same or newer than the one in the source GOT.



OS installed in the source GOT ≦ OS installed in the target GOT

2 Precautions

If the OS version in the target GOT is the same or older than the one in the source GOT, some functions/settings are invalid due to OS incompatibility

3 Solution

It is recommended to copy OS with monitor data into PC card, and copy them into the target GOT. (The OS version installed in GOT can be checked within the utility (internal memory information.)

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